COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
AIR QUALITY PROGRAM

TITLE V/STATE OPERATING PERMIT

Issue Date: Effective Date:

Expiration Date:

In accordance with the provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and 25 Pa. Code Chapter 127, the Owner, [and Operator if noted] (hereinafter referred to as permittee) identified below is authorized by the Department of Environmental Protection (Department) to operate the air emission source(s) more fully described in this permit. This Facility is subject to all terms and conditions specified in this permit. Nothing in this permit relieves the permittee from its obligations to comply with all applicable Federal, State and Local laws and regulations.

The regulatory or statutory authority for each permit condition is set forth in brackets. All terms and conditions in this permit are federally enforceable applicable requirements unless otherwise designated as "State-Only" or "non-applicable" requirements.

TITLE V Permit No: 23-00089

Federal Tax Id - Plant Code: 65-0968151-1

Owner Information

Name: MARCUS HOOK ENERGY LP
Mailing Address: 100 GREEN ST
MARCUS HOOK, PA 19061-4800

Plant Information

Plant: MARCUS HOOK ENERGY LP/750 MW
Location: 23 Delaware County 23825 Marcus Hook Borough
SIC Code: 4931 Trans. & Utilities - Electric And Other Services Combined

Responsible Official

Name: KEVIN COLLINS
Title: ASSET MGR
Phone: (478) 396 - 2105

Permit Contact Person

Name: JENNIFER EISENMANN
Title: EHS MGR
Phone: (610) 364 - 2470 Ext.249

[Signature] _____

JAMES D. REBARCHAK, SOUTHEAST REGION AIR PROGRAM MANAGER

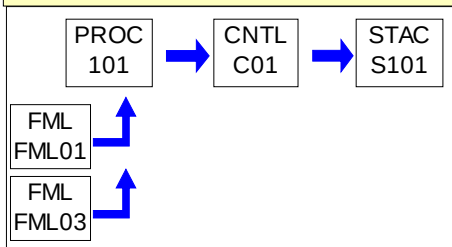
SECTION A. Table of Contents

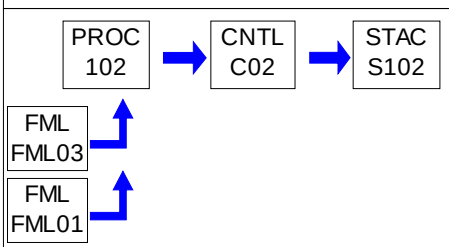
SECTION A. Table of Contents

SECTION A. Site Inventory List

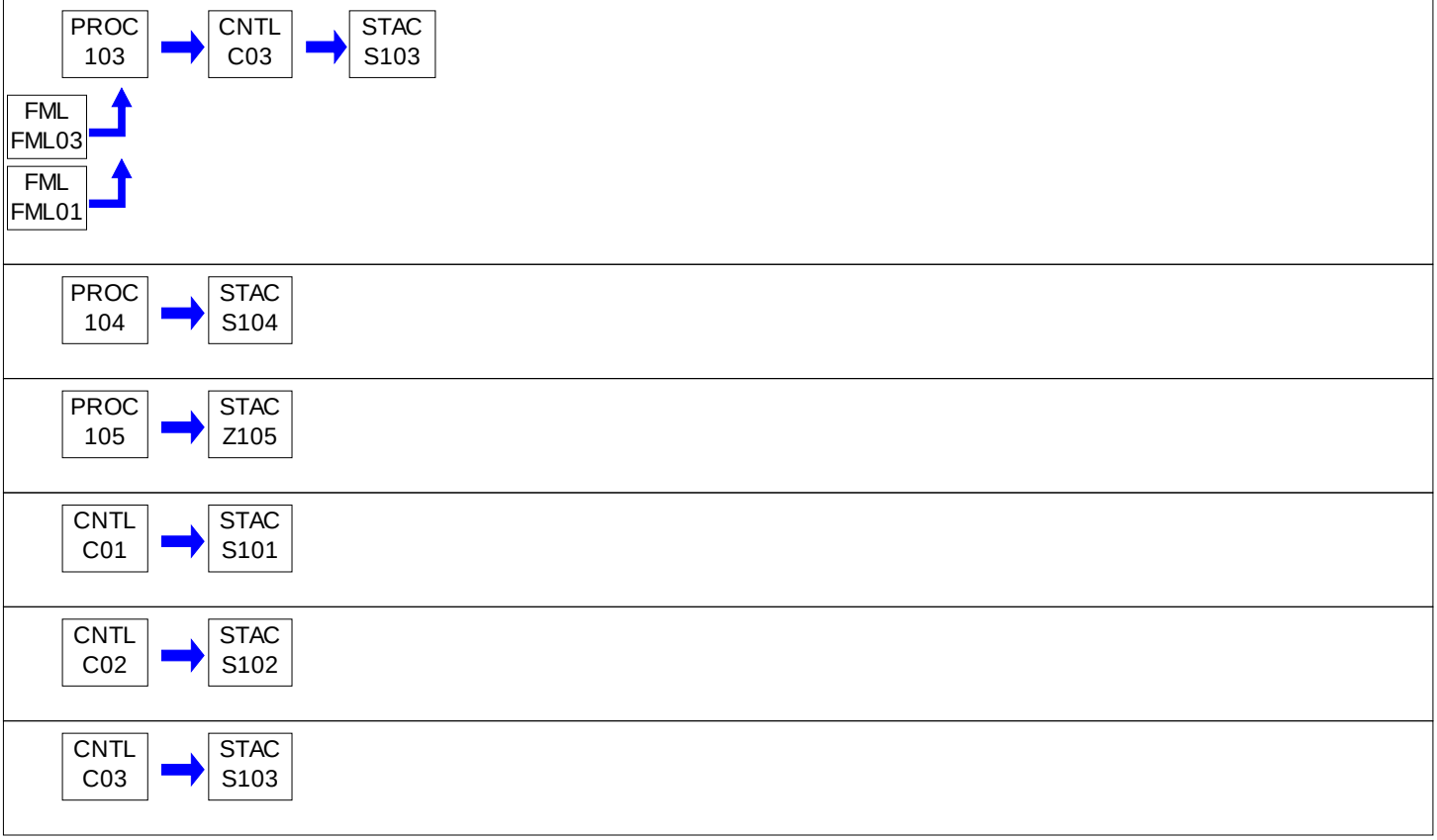
Source ID	Source Name	Capacity/Throughput		Fuel/Material
101	COMBUSTION TURBINE 1 & DUCT BURNER 1	2,282.000	MMBTU/HR	
		2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
		333.000	MCF/HR	CAPACITY OF DB
102	COMBUSTION TURBINE 2 & DUCT BURNER 2	2,282.000	MMBTU/HR	
		2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
		333.000	MCF/HR	CAPACITY OF DB
103	COMBUSTION TURBINE 3 & DUCT BURNER 3	2,282.000	MMBTU/HR	
		2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
		333.000	MCF/HR	CAPACITY OF DB
104	COOLING TOWER W/ HIGH EFF DRIFT ELIMINATOR	8.904	M Gal/HR	WATER
105	PARTS WASHER		N/A	CLEANING SOLVENT
C01	CT1 SELECTIVE CATALYTIC REDUCTION		N/A	EXHAUST FROM 101
C02	CT2 SELECTIVE CATALYTIC REDUCTION		N/A	EXHAUST FROM 102
C03	CT3 SELECTIVE CATALYTIC REDUCTION		N/A	EXHAUST FROM 103
FML01	NATURAL GAS			
FML03	GASEOUS FUEL			
S101	CT1 STACK			
S102	CT2 STACK			
S103	CT3 STACK			
S104	COOLING TOWER STACK			
Z105	PARTS WASHER FUGITIVE EMISSIONS			

PERMIT MAPS





PERMIT MAPS


PROC 103
CNTL C03
STAC S103
FML FML03
FML FML01
PROC 104
STAC S104
PROC 105
STAC Z105
CNTL C01
STAC S101
CNTL C02
STAC S102
CNTL C03
STAC S103

SECTION B. General Title V Requirements

#001 [25 Pa. Code § 121.1]

Definitions

Words and terms that are not otherwise defined in this permit shall have the meanings set forth in Section 3 of the Air Pollution Control Act (35 P.S. § 4003) and 25 Pa. Code § 121.1.

#002 [25 Pa. Code § 121.7]

Prohibition of Air Pollution

No person may permit air pollution as that term is defined in the act.

#003 [25 Pa. Code § 127.512(c)(4)]

Property Rights

This permit does not convey property rights of any sort, or any exclusive privileges.

#004 [25 Pa. Code § 127.446(a) and (c)]

Permit Expiration

This operating permit is issued for a fixed term of five (5) years and shall expire on the date specified on Page 1 of this permit. The terms and conditions of the expired permit shall automatically continue pending issuance of a new Title V permit, provided the permittee has submitted a timely and complete application and paid applicable fees required under 25 Pa. Code Chapter 127, Subchapter I and the Department is unable, through no fault of the permittee, to issue or deny a new permit before the expiration of the previous permit. An application is complete if it contains sufficient information to begin processing the application, has the applicable sections completed and has been signed by a responsible official.

#005 [25 Pa. Code §§ 127.412, 127.413, 127.414, 127.446(e) & 127.503]

Permit Renewal

(a) An application for the renewal of the Title V permit shall be submitted to the Department at least six (6) months, and not more than 18 months, before the expiration date of this permit. The renewal application is timely if a complete application is submitted to the Department's Regional Air Manager within the timeframe specified in this permit condition.

(b) The application for permit renewal shall include the current permit number, the appropriate permit renewal fee, a description of any permit revisions and off-permit changes that occurred during the permit term, and any applicable requirements that were promulgated and not incorporated into the permit during the permit term.

(c) The renewal application shall also include submission of proof that the local municipality and county, in which the facility is located, have been notified in accordance with 25 Pa. Code § 127.413. The application for renewal of the Title V permit shall also include submission of compliance review forms which have been used by the permittee to update information submitted in accordance with either 25 Pa. Code § 127.412(b) or § 127.412(j).

(d) The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information during the permit renewal process. The permittee shall also promptly provide additional information as necessary to address any requirements that become applicable to the source after the date a complete renewal application was submitted but prior to release of a draft permit.

#006 [25 Pa. Code §§ 127.450(a)(4) & 127.464(a)]

Transfer of Ownership or Operational Control

(a) In accordance with 25 Pa. Code § 127.450(a)(4), a change in ownership or operational control of the source shall be treated as an administrative amendment if:

(1) The Department determines that no other change in the permit is necessary;

(2) A written agreement has been submitted to the Department identifying the specific date of the transfer of permit responsibility, coverage and liability between the current and the new permittee; and,

(3) A compliance review form has been submitted to the Department and the permit transfer has been approved by the Department.

SECTION B. General Title V Requirements

(b) In accordance with 25 Pa. Code § 127.464(a), this permit may not be transferred to another person except in cases of transfer-of-ownership which are documented and approved to the satisfaction of the Department.

#007 [25 Pa. Code § 127.513, 35 P.S. § 4008 and § 114 of the CAA]

Inspection and Entry

(a) Upon presentation of credentials and other documents as may be required by law for inspection and entry purposes, the permittee shall allow the Department of Environmental Protection or authorized representatives of the Department to perform the following:

(1) Enter at reasonable times upon the permittee's premises where a Title V source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit;

(2) Have access to and copy or remove, at reasonable times, records that are kept under the conditions of this permit;

(3) Inspect at reasonable times, facilities, equipment including monitoring and air pollution control equipment, practices, or operations regulated or required under this permit;

(4) Sample or monitor, at reasonable times, substances or parameters, for the purpose of assuring compliance with the permit or applicable requirements as authorized by the Clean Air Act, the Air Pollution Control Act, or the regulations promulgated under the Acts.

(b) Pursuant to 35 P.S. § 4008, no person shall hinder, obstruct, prevent or interfere with the Department or its personnel in the performance of any duty authorized under the Air Pollution Control Act.

(c) Nothing in this permit condition shall limit the ability of the EPA to inspect or enter the premises of the permittee in accordance with Section 114 or other applicable provisions of the Clean Air Act.

#008 [25 Pa. Code §§ 127.25, 127.444, & 127.512(c)(1)]

Compliance Requirements

(a) The permittee shall comply with the conditions of this permit. Noncompliance with this permit constitutes a violation of the Clean Air Act and the Air Pollution Control Act and is grounds for one (1) or more of the following:

(1) Enforcement action

(2) Permit termination, revocation and reissuance or modification

(3) Denial of a permit renewal application

(b) A person may not cause or permit the operation of a source, which is subject to 25 Pa. Code Article III, unless the source(s) and air cleaning devices identified in the application for the plan approval and operating permit and the plan approval issued to the source are operated and maintained in accordance with specifications in the applications and the conditions in the plan approval and operating permit issued by the Department. A person may not cause or permit the operation of an air contamination source subject to 25 Pa. Code Chapter 127 in a manner inconsistent with good operating practices.

(c) For purposes of Sub-condition (b) of this permit condition, the specifications in applications for plan approvals and operating permits are the physical configurations and engineering design details which the Department determines are essential for the permittee's compliance with the applicable requirements in this Title V permit.

#009 [25 Pa. Code § 127.512(c)(2)]

Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

#010 [25 Pa. Code §§ 127.411(d) & 127.512(c)(5)]

Duty to Provide Information

(a) The permittee shall furnish to the Department, within a reasonable time, information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit, or

SECTION B. General Title V Requirements

to determine compliance with the permit.

(b) Upon request, the permittee shall also furnish to the Department copies of records that the permittee is required to keep by this permit, or for information claimed to be confidential, the permittee may furnish such records directly to the Administrator of EPA along with a claim of confidentiality.

#011 [25 Pa. Code §§ 127.463, 127.512(c)(3) & 127.542]

Reopening and Revising the Title V Permit for Cause

(a) This Title V permit may be modified, revoked, reopened and reissued or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay a permit condition.

(b) This permit may be reopened, revised and reissued prior to expiration of the permit under one or more of the following circumstances:

(1) Additional applicable requirements under the Clean Air Act or the Air Pollution Control Act become applicable to a Title V facility with a remaining permit term of three (3) or more years prior to the expiration date of this permit. The Department will revise the permit as expeditiously as practicable but not later than 18 months after promulgation of the applicable standards or regulations. No such revision is required if the effective date of the requirement is later than the expiration date of this permit, unless the original permit or its terms and conditions has been extended.

(2) Additional requirements, including excess emissions requirements, become applicable to an affected source under the acid rain program. Upon approval by the Administrator of EPA, excess emissions offset plans for an affected source shall be incorporated into the permit.

(3) The Department or the EPA determines that this permit contains a material mistake or inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.

(4) The Department or the Administrator of EPA determines that the permit must be revised or revoked to assure compliance with the applicable requirements.

(c) Proceedings to revise this permit shall follow the same procedures which apply to initial permit issuance and shall affect only those parts of this permit for which cause to revise exists. The revision shall be made as expeditiously as practicable.

(d) Regardless of whether a revision is made in accordance with (b)(1) above, the permittee shall meet the applicable standards or regulations promulgated under the Clean Air Act within the time frame required by standards or regulations.

#012 [25 Pa. Code § 127.543]

Reopening a Title V Permit for Cause by EPA

As required by the Clean Air Act and regulations adopted thereunder, this permit may be modified, reopened and reissued, revoked or terminated for cause by EPA in accordance with procedures specified in 25 Pa. Code § 127.543.

#013 [25 Pa. Code § 127.522(a)]

Operating Permit Application Review by the EPA

The applicant may be required by the Department to provide a copy of the permit application, including the compliance plan, directly to the Administrator of the EPA. Copies of title V permit applications to EPA, pursuant to 25 PA Code §127.522(a), shall be submitted, if required, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#014 [25 Pa. Code § 127.541]

Significant Operating Permit Modifications

When permit modifications during the term of this permit do not qualify as minor permit modifications or administrative amendments, the permittee shall submit an application for significant Title V permit modifications in accordance with

SECTION B. General Title V Requirements

25 Pa. Code § 127.541. Notifications to EPA, pursuant to 25 PA Code §127.522(a), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#015 [25 Pa. Code §§ 121.1 & 127.462]

Minor Operating Permit Modifications

The permittee may make minor operating permit modifications (as defined in 25 Pa. Code §121.1), on an expedited basis, in accordance with 25 Pa. Code §127.462 (relating to minor operating permit modifications). Notifications to EPA, pursuant to 25 PA Code §127.462(c), if required, shall be submitted, to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

#016 [25 Pa. Code § 127.450]

Administrative Operating Permit Amendments

(a) The permittee may request administrative operating permit amendments, as defined in 25 Pa. Code §127.450(a). Copies of request for administrative permit amendment to EPA, pursuant to 25 PA Code §127.450(c)(1), if required, shall be submitted to the following EPA e-mail box:

R3_Air_Apps_and_Notices@epa.gov

Please place the following in the subject line: TV [permit number], [Facility Name].

(b) Upon final action by the Department granting a request for an administrative operating permit amendment covered under §127.450(a)(5), the permit shield provisions in 25 Pa. Code § 127.516 (relating to permit shield) shall apply to administrative permit amendments incorporated in this Title V Permit in accordance with §127.450(c), unless precluded by the Clean Air Act or the regulations thereunder.

#017 [25 Pa. Code § 127.512(b)]

Severability Clause

The provisions of this permit are severable, and if any provision of this permit is determined by the Environmental Hearing Board or a court of competent jurisdiction, or US EPA to be invalid or unenforceable, such a determination will not affect the remaining provisions of this permit.

#018 [25 Pa. Code §§ 127.704, 127.705 & 127.707]

Fee Payment

(a) The permittee shall pay fees to the Department in accordance with the applicable fee schedules in 25 Pa. Code Chapter 127, Subchapter I (relating to plan approval and operating permit fees).

(b) Emission Fees. The permittee shall, on or before September 1st of each year, pay applicable annual Title V emission fees for emissions occurring in the previous calendar year as specified in 25 Pa. Code § 127.705. The permittee is not required to pay an emission fee for emissions of more than 4,000 tons of each regulated pollutant emitted from the facility.

(c) As used in this permit condition, the term "regulated pollutant" is defined as a VOC, each pollutant regulated under Sections 111 and 112 of the Clean Air Act and each pollutant for which a National Ambient Air Quality Standard has been promulgated, except that carbon monoxide is excluded.

(d) Late Payment. Late payment of emission fees will subject the permittee to the penalties prescribed in 25 Pa. Code § 127.707 and may result in the suspension or termination of the Title V permit. The permittee shall pay a penalty of fifty percent (50%) of the fee amount, plus interest on the fee amount computed in accordance with 26 U.S.C.A. § 6621(a)(2) from the date the emission fee should have been paid in accordance with the time frame specified in 25 Pa. Code § 127.705(c).

SECTION B. General Title V Requirements

(e) The permittee shall pay an annual operating permit administration fee according to the fee schedule established in 25 Pa. Code § 127.704(c) if the facility, identified in Subparagraph (iv) of the definition of the term "Title V facility" in 25 Pa. Code § 121.1, is subject to Title V after the EPA Administrator completes a rulemaking requiring regulation of those sources under Title V of the Clean Air Act.

(f) This permit condition does not apply to a Title V facility which qualifies for exemption from emission fees under 35 P.S. § 4006.3(f).

#019 [25 Pa. Code §§ 127.14(b) & 127.449]

Authorization for De Minimis Emission Increases

(a) This permit authorizes de minimis emission increases from a new or existing source in accordance with 25 Pa. Code §§ 127.14 and 127.449 without the need for a plan approval or prior issuance of a permit modification. The permittee shall provide the Department with seven (7) days prior written notice before commencing any de minimis emissions increase that would result from either: (1) a physical change of minor significance under § 127.14(c)(1); or (2) the construction, installation, modification or reactivation of an air contamination source. The written notice shall:

(1) Identify and describe the pollutants that will be emitted as a result of the de minimis emissions increase.

(2) Provide emission rates expressed in tons per year and in terms necessary to establish compliance consistent with any applicable requirement.

The Department may disapprove or condition de minimis emission increases at any time.

(b) Except as provided below in (c) and (d) of this permit condition, the permittee is authorized during the term of this permit to make de minimis emission increases (expressed in tons per year) up to the following amounts without the need for a plan approval or prior issuance of a permit modification:

(1) Four tons of carbon monoxide from a single source during the term of the permit and 20 tons of carbon monoxide at the facility during the term of the permit.

(2) One ton of NOx from a single source during the term of the permit and 5 tons of NOx at the facility during the term of the permit.

(3) One and six-tenths tons of the oxides of sulfur from a single source during the term of the permit and 8.0 tons of oxides of sulfur at the facility during the term of the permit.

(4) Six-tenths of a ton of PM10 from a single source during the term of the permit and 3.0 tons of PM10 at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(5) One ton of VOCs from a single source during the term of the permit and 5.0 tons of VOCs at the facility during the term of the permit. This shall include emissions of a pollutant regulated under Section 112 of the Clean Air Act unless precluded by the Clean Air Act or 25 Pa. Code Article III.

(c) In accordance with § 127.14, the permittee may install the following minor sources without the need for a plan approval:

(1) Air conditioning or ventilation systems not designed to remove pollutants generated or released from other sources.

(2) Combustion units rated at 2,500,000 or less Btu per hour of heat input.

(3) Combustion units with a rated capacity of less than 10,000,000 Btu per hour heat input fueled by natural gas supplied by a public utility, liquefied petroleum gas or by commercial fuel oils which are No. 2 or lighter, viscosity less than or equal to 5.82 c St, and which meet the sulfur content requirements of 25 Pa. Code § 123.22 (relating to combustion units). For purposes of this permit, commercial fuel oil shall be virgin oil which has no reprocessed, recycled or waste material added.

(4) Space heaters which heat by direct heat transfer.

SECTION B. General Title V Requirements

(5) Laboratory equipment used exclusively for chemical or physical analysis.

(6) Other sources and classes of sources determined to be of minor significance by the Department.

(d) This permit does not authorize de minimis emission increases if the emissions increase would cause one or more of the following:

(1) Increase the emissions of a pollutant regulated under Section 112 of the Clean Air Act except as authorized in Subparagraphs (b)(4) and (5) of this permit condition.

(2) Subject the facility to the prevention of significant deterioration requirements in 25 Pa. Code Chapter 127, Subchapter D and/or the new source review requirements in Subchapter E.

(3) Violate any applicable requirement of the Air Pollution Control Act, the Clean Air Act, or the regulations promulgated under either of the acts.

(4) Changes which are modifications under any provision of Title I of the Clean Air Act and emission increases which would exceed the allowable emissions level (expressed as a rate of emissions or in terms of total emissions) under the Title V permit.

(e) Unless precluded by the Clean Air Act or the regulations thereunder, the permit shield described in 25 Pa. Code § 127.516 (relating to permit shield) shall extend to the changes made under 25 Pa. Code § 127.449 (relating to de minimis emission increases).

(f) Emissions authorized under this permit condition shall be included in the monitoring, recordkeeping and reporting requirements of this permit.

(g) Except for de minimis emission increases allowed under this permit, 25 Pa. Code § 127.449, or sources and physical changes meeting the requirements of 25 Pa. Code § 127.14, the permittee is prohibited from making physical changes or engaging in activities that are not specifically authorized under this permit without first applying for a plan approval. In accordance with § 127.14(b), a plan approval is not required for the construction, modification, reactivation, or installation of the sources creating the de minimis emissions increase.

(h) The permittee may not meet de minimis emission threshold levels by offsetting emission increases or decreases at the same source.

#020 [25 Pa. Code §§ 127.11a & 127.215]

Reactivation of Sources

(a) The permittee may reactivate a source at the facility that has been out of operation or production for at least one year, but less than or equal to five (5) years, if the source is reactivated in accordance with the requirements of 25 Pa. Code §§ 127.11a and 127.215. The reactivated source will not be considered a new source.

(b) A source which has been out of operation or production for more than five (5) years but less than 10 years may be reactivated and will not be considered a new source if the permittee satisfies the conditions specified in 25 Pa. Code § 127.11a(b).

#021 [25 Pa. Code §§ 121.9 & 127.216]

Circumvention

(a) The owner of this Title V facility, or any other person, may not circumvent the new source review requirements of 25 Pa. Code Chapter 127, Subchapter E by causing or allowing a pattern of ownership or development, including the phasing, staging, delaying or engaging in incremental construction, over a geographic area of a facility which, except for the pattern of ownership or development, would otherwise require a permit or submission of a plan approval application.

(b) No person may permit the use of a device, stack height which exceeds good engineering practice stack height, dispersion technique or other technique which, without resulting in reduction of the total amount of air contaminants emitted, conceals or dilutes an emission of air contaminants which would otherwise be in violation of this permit, the Air Pollution Control Act or the regulations promulgated thereunder, except that with prior approval of the Department,

SECTION B. General Title V Requirements

the device or technique may be used for control of malodors.

#022 [25 Pa. Code §§ 127.402(d) & 127.513(1)]

Submissions

(a) Reports, test data, monitoring data, notifications and requests for renewal of the permit shall be submitted to the:

Regional Air Program Manager
PA Department of Environmental Protection
(At the address given on the permit transmittal letter,
or otherwise notified)

(b) Any report or notification for the EPA Administrator or EPA Region III should be addressed to:

Office of Air Enforcement and Compliance Assistance (3AP20)
United States Environmental Protection Agency
Region 3
1650 Arch Street
Philadelphia, PA 19103-2029

(c) An application, form, report or compliance certification submitted pursuant to this permit condition shall contain certification by a responsible official as to truth, accuracy, and completeness as required under 25 Pa. Code § 127.402(d). Unless otherwise required by the Clean Air Act or regulations adopted thereunder, this certification and any other certification required pursuant to this permit shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

#023 [25 Pa. Code §§ 127.441(c) & 127.463(e); Chapter 139; & 114(a)(3), 504(b) of the CAA]

Sampling, Testing and Monitoring Procedures

(a) The permittee shall perform the emissions monitoring and analysis procedures or test methods for applicable requirements of this Title V permit. In addition to the sampling, testing and monitoring procedures specified in this permit, the Permittee shall comply with any additional applicable requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) The sampling, testing and monitoring required under the applicable requirements of this permit, shall be conducted in accordance with the requirements of 25 Pa. Code Chapter 139 unless alternative methodology is required by the Clean Air Act (including §§ 114(a)(3) and 504(b)) and regulations adopted thereunder.

#024 [25 Pa. Code §§ 127.511 & Chapter 135]

Recordkeeping Requirements

(a) The permittee shall maintain and make available, upon request by the Department, records of required monitoring information that include the following:

(1) The date, place (as defined in the permit) and time of sampling or measurements.

(2) The dates the analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of the analyses.

(6) The operating conditions as existing at the time of sampling or measurement.

(b) The permittee shall retain records of the required monitoring data and supporting information for at least five (5) years from the date of the monitoring sample, measurement, report or application. Supporting information includes the calibration data and maintenance records and original strip-chart recordings for continuous monitoring instrumentation, and copies of reports required by the permit.

SECTION B. General Title V Requirements

(c) The permittee shall maintain and make available to the Department upon request, records including computerized records that may be necessary to comply with the reporting, recordkeeping and emission statement requirements in 25 Pa. Code Chapter 135 (relating to reporting of sources). In accordance with 25 Pa. Code Chapter 135, § 135.5, such records may include records of production, fuel usage, maintenance of production or pollution control equipment or other information determined by the Department to be necessary for identification and quantification of potential and actual air contaminant emissions. If direct recordkeeping is not possible or practical, sufficient records shall be kept to provide the needed information by indirect means.

#025 [25 Pa. Code §§ 127.411(d), 127.442, 127.463(e) & 127.511(c)]

Reporting Requirements

(a) The permittee shall comply with the reporting requirements for the applicable requirements specified in this Title V permit. In addition to the reporting requirements specified herein, the permittee shall comply with any additional applicable reporting requirements promulgated under the Clean Air Act after permit issuance regardless of whether the permit is revised.

(b) Pursuant to 25 Pa. Code § 127.511(c), the permittee shall submit reports of required monitoring at least every six (6) months unless otherwise specified in this permit. Instances of deviations (as defined in 25 Pa. Code § 121.1) from permit requirements shall be clearly identified in the reports. The reporting of deviations shall include the probable cause of the deviations and corrective actions or preventative measures taken, except that sources with continuous emission monitoring systems shall report according to the protocol established and approved by the Department for the source. The required reports shall be certified by a responsible official.

(c) Every report submitted to the Department under this permit condition shall comply with the submission procedures specified in Section B, Condition #022(c) of this permit.

(d) Any records, reports or information obtained by the Department or referred to in a public hearing shall be made available to the public by the Department except for such records, reports or information for which the permittee has shown cause that the documents should be considered confidential and protected from disclosure to the public under Section 4013.2 of the Air Pollution Control Act and consistent with Sections 112(d) and 114(c) of the Clean Air Act and 25 Pa. Code § 127.411(d). The permittee may not request a claim of confidentiality for any emissions data generated for the Title V facility.

#026 [25 Pa. Code § 127.513]

Compliance Certification

(a) One year after the date of issuance of the Title V permit, and each year thereafter, unless specified elsewhere in the permit, the permittee shall submit to the Department and EPA Region III a certificate of compliance with the terms and conditions in this permit, for the previous year, including the emission limitations, standards or work practices. This certification shall include:

(1) The identification of each term or condition of the permit that is the basis of the certification.

(2) The compliance status.

(3) The methods used for determining the compliance status of the source, currently and over the reporting period.

(4) Whether compliance was continuous or intermittent.

(b) The compliance certification shall be postmarked or hand-delivered no later than thirty days after each anniversary of the date of issuance of this Title V Operating Permit, or on the submittal date specified elsewhere in the permit, to the Department and EPA in accordance with the submission requirements specified in condition #022 of this section.

#027 [25 Pa. Code § 127.3]

Operational Flexibility

The permittee is authorized to make changes within the Title V facility in accordance with the following provisions in 25 Pa. Code Chapter 127 which implement the operational flexibility requirements of Section 502(b)(10) of the Clean Air Act and Section 6.1(i) of the Air Pollution Control Act:

(1) Section 127.14 (relating to exemptions)

SECTION B. General Title V Requirements

(2) Section 127.447 (relating to alternative operating scenarios)

(3) Section 127.448 (relating to emissions trading at facilities with federally enforceable emissions caps)

(4) Section 127.449 (relating to de minimis emission increases)

(5) Section 127.450 (relating to administrative operating permit amendments)

(6) Section 127.462 (relating to minor operating permit amendments)

(7) Subchapter H (relating to general plan approvals and operating permits)

#028 [25 Pa. Code §§ 127.441(d), 127.512(i) and 40 CFR Part 68]

Risk Management

(a) If required by Section 112(r) of the Clean Air Act, the permittee shall develop and implement an accidental release program consistent with requirements of the Clean Air Act, 40 CFR Part 68 (relating to chemical accident prevention provisions) and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act (P.L. 106-40).

(b) The permittee shall prepare and implement a Risk Management Plan (RMP) which meets the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68 and the Federal Chemical Safety Information, Site Security and Fuels Regulatory Relief Act when a regulated substance listed in 40 CFR § 68.130 is present in a process in more than the listed threshold quantity at the Title V facility. The permittee shall submit the RMP to the federal Environmental Protection Agency according to the following schedule and requirements:

(1) The permittee shall submit the first RMP to a central point specified by EPA no later than the latest of the following:

(i) Three years after the date on which a regulated substance is first listed under § 68.130; or,

(ii) The date on which a regulated substance is first present above a threshold quantity in a process.

(2) The permittee shall submit any additional relevant information requested by the Department or EPA concerning the RMP and shall make subsequent submissions of RMPs in accordance with 40 CFR § 68.190.

(3) The permittee shall certify that the RMP is accurate and complete in accordance with the requirements of 40 CFR Part 68, including a checklist addressing the required elements of a complete RMP.

(c) As used in this permit condition, the term "process" shall be as defined in 40 CFR § 68.3. The term "process" means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances or any combination of these activities. For purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, shall be considered a single process.

(d) If the Title V facility is subject to 40 CFR Part 68, as part of the certification required under this permit, the permittee shall:

(1) Submit a compliance schedule for satisfying the requirements of 40 CFR Part 68 by the date specified in 40 CFR § 68.10(a); or,

(2) Certify that the Title V facility is in compliance with all requirements of 40 CFR Part 68 including the registration and submission of the RMP.

(e) If the Title V facility is subject to 40 CFR Part 68, the permittee shall maintain records supporting the implementation of an accidental release program for five (5) years in accordance with 40 CFR § 68.200.

(f) When the Title V facility is subject to the accidental release program requirements of Section 112(r) of the Clean Air Act and 40 CFR Part 68, appropriate enforcement action will be taken by the Department if:

(1) The permittee fails to register and submit the RMP or a revised plan pursuant to 40 CFR Part 68.

SECTION B. General Title V Requirements

(2) The permittee fails to submit a compliance schedule or include a statement in the compliance certification required under Condition #26 of Section B of this Title V permit that the Title V facility is in compliance with the requirements of Section 112(r) of the Clean Air Act, 40 CFR Part 68, and 25 Pa. Code § 127.512(i).

#029 [25 Pa. Code § 127.512(e)]

Approved Economic Incentives and Emission Trading Programs

No permit revision shall be required under approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this Title V permit.

#030 [25 Pa. Code §§ 127.516, 127.450(d), 127.449(f) & 127.462(g)]

Permit Shield

(a) The permittee's compliance with the conditions of this permit shall be deemed in compliance with applicable requirements (as defined in 25 Pa. Code § 121.1) as of the date of permit issuance if either of the following applies:

(1) The applicable requirements are included and are specifically identified in this permit.

(2) The Department specifically identifies in the permit other requirements that are not applicable to the permitted facility or source.

(b) Nothing in 25 Pa. Code § 127.516 or the Title V permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act, including the authority of the Administrator of the EPA provided thereunder.

(2) The liability of the permittee for a violation of an applicable requirement prior to the time of permit issuance.

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act.

(4) The ability of the EPA to obtain information from the permittee under Section 114 of the Clean Air Act.

(c) Unless precluded by the Clean Air Act or regulations thereunder, final action by the Department incorporating a significant permit modification in this Title V Permit shall be covered by the permit shield at the time that the permit containing the significant modification is issued.

#031 [25 Pa. Code §135.3]

Reporting

(a) The permittee shall submit by March 1 of each year an annual emissions report for the preceding calendar year. The report shall include information for all active previously reported sources, new sources which were first operated during the preceding calendar year, and sources modified during the same period which were not previously reported. All air emissions from the facility should be estimated and reported.

(b) A source owner or operator may request an extension of time from the Department for the filing of an annual emissions report, and the Department may grant the extension for reasonable cause.

#032 [25 Pa. Code §135.4]

Report Format

Emissions reports shall contain sufficient information to enable the Department to complete its emission inventory. Emissions reports shall be made by the source owner or operator in a format specified by the Department.

SECTION C. Site Level Requirements

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §121.7]

Prohibition of air pollution.

No person may permit air pollution as that term is defined in the Air Pollution Control Act (35 P.S. Section 4003).

 # 002 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

No person may permit the emission into the outdoor atmosphere of fugitive air contaminant from a source other than the following:

(a) construction or demolition of buildings or structures;
(b) grading, paving and maintenance of roads and streets;
(c) use of roads and streets. Emissions from material in or on trucks, railroad cars and other vehicular equipment are not considered as emissions from use of roads and streets;
(d) clearing of land;
(e) stockpiling of materials;
(f) open burning operations, as specified in 25 Pa. Code § 129.14;
(g) blasting in open pit mines. Emissions from drilling are not considered as emissions from blasting;
(h) coke oven batteries, provided the fugitive air contaminants emitted from any coke oven battery comply with the standards for visible fugitive emissions in 25 Pa. Code §§ 123.44 and 129.15 (relating to limitations of visible fugitive air contaminants from operation of any coke oven battery; and coke pushing operations); and
(i) sources and classes of sources other than those identified in (a)-(h), above, for which the permittee has obtained a determination from the Department that fugitive emissions from the source, after appropriate control, meet the following requirements:
(1) the emissions are of minor significance with respect to causing air pollution; and
(2) the emissions are not preventing or interfering with the attainment or maintenance of any ambient air quality standard.

 # 003 [25 Pa. Code §123.2]

Fugitive particulate matter

A person may not permit fugitive particulate matter to be emitted into the outdoor atmosphere from a source specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions) if such emissions are visible at the point the emissions pass outside the person's property.

 # 004 [25 Pa. Code §123.31]

Limitations

A person may not permit the emission into the outdoor atmosphere of any malodorous air contaminants from any source in such a manner that the malodors are detectable outside the property of the person on whose land the source is being operated.

 # 005 [25 Pa. Code §123.41]

Limitations

A person may not permit the emission into the outdoor atmosphere of visible air contaminants in such a manner that the opacity of the emission is either of the following:

(a). Equal to or greater than 20% for a period or periods aggregating more than three minutes in any 1 hour.

(b). Equal to or greater than 60% at any time.

 # 006 [25 Pa. Code §123.42]

Exceptions

The opacity limitations as per 25 Pa. Code § 123.41 shall not apply to a visible emission in either of the following instances:

(a) When the presence of uncombined water is the only reason for failure to meet the limitations.
(b) When the emission results from the operation of equipment used solely to train and test persons in observing the

SECTION C. Site Level Requirements

opacity of visible emissions.
(c) When the emission results from the sources specified in 25 Pa. Code § 123.1(a)(1)-(9) (relating to prohibition of certain fugitive emissions).

 # 007 [25 Pa. Code §129.14]
Open burning operations
No person may permit the open burning of material in the Southeast Air Basin exempt where the open burning operations result from:

(1) a fire set to prevent or abate a fire hazard, when approved by the Department and set by or under the supervision of a public officer;
(2) any fire set for the purpose of instructing personnel in fire fighting, when approved by the Department;
(3) a fire set for the prevention and control of disease or pests, when approved by the Department;
(4) a fire set in conjunction with the production of agricultural commodities in their unmanufactured state on the premises of the farm operation;
(5) a fire set for the purpose of burning domestic refuse, when the fire is on the premises of a structure occupied solely as a dwelling by two families or less and when the refuse results from the normal occupancy of the structure;
(6) a fire set solely for recreational or ceremonial purposes; or
(7) a fire set solely for cooking food.

II. TESTING REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]
Operating permit terms and conditions.
[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.512.]

(a) If at any time the Department has cause to believe that air contaminant emissions from any source may be in excess of the limitations specified in this Permit, or established pursuant to, any applicable rule or regulation contained in 25 Pa. Code Article III, the permittee shall be required to conduct whatever tests are deemed necessary by the Department to determine the actual emission rate(s).

(b) Such testing shall be conducted in accordance with the provisions of 25 Pa. Code Chapter 139 and the most current version of the DEP Source Testing Manual, when applicable, and in accordance with any restrictions or limitations established by the Department at such time as it notifies the permittee that testing is required.

 # 009 [25 Pa. Code §127.441]
Operating permit terms and conditions.
(a) The permittee shall submit one paper copy plus one electronic copy of all source test submissions (notifications, protocols, reports, supplemental information, etc.) to both the AQ Program Manager for the Southeast Regional Office and the PSIMS Administrator in Central Office (mail and email addresses are provided below). Any questions or concerns about source testing submissions can be sent to RA-EPstacktesting@pa.gov and the PSIMS Administrator will address them.

(b) The following pertinent information shall be listed on the title page.

1. Test Date(s)

a. For protocols, provide the proposed date on which testing will commence or “TBD”
b. For reports, provide the first and last day of testing

2. Facility Identification Number (Facility - ID): For test programs that were conducted under a multi-site protocol, also include the PF Id under which the protocol was stored in PSIMS, as indicated in the protocol response letter.

3. Source ID(s) for the applicable source(s) and air pollution control device(s): The term Source ID is used in the permit but “Other Id” is used in DEP electronic systems. They are the same number and must also be listed for control equipment

SECTION C. Site Level Requirements

4. Testing Requirements (all that apply)

a. Plan approval number(s)
b. Operating permit number
c. Applicable federal subpart(s) (i.e. 40 CFR 60, Subpart JJJJ)
d. Special purpose(s) (Consent Order, RFD, RACT II, Tier II, etc.)

(c) Mail all paper submissions to both the PSIMS Administrator and the Air Quality Program Manager for the Southeast Regional Office. Mailing addresses are provided below.

Central Office
Pennsylvania Department of Environmental Protection
Attn: PSIMS Administrator
P.O. Box 8468
Harrisburg, PA 17105-8468

Southeast Region
Pennsylvania Department of Environmental Protection
Attn: Air Quality Program Manager
2 East Main Street
Norristown, PA 19401

(d) Eliminate shading, color ink for data emphasis, small font size, and color saturation as the scanning to create an electronic file is done in black and white. Shading and color emphasis do not scan well and make the electronic copies difficult to read.

(e) Email all electronic submissions to both the PSIMS Administrator in Central Office and the Air Quality Program Manager for the Southeast Regional Office. Email addresses are provided below.

Central Office
RA-EPstacktesting@pa.gov

Southeast Region
RA-EPSEstacktesting@pa.gov

(f) The Department limits emails to 15 MB and PSIMS has a file size limitation of 100 MB for electronic files. Submit just one electronic file (convert any Microsoft Word or Excel files to an Adobe PDF format and combine them with the report or protocol), unless the submission contains CONFIDENTIAL information.

(g) If confidential information must be submitted, submit both a public copy, which has been redacted, and a confidential copy. The cover page of each submittal should state whether it is a “Public Copy” or “Confidential Copy” and each page of the latter must be marked “CONFIDENTIAL”.

III. MONITORING REQUIREMENTS.

 # 010 [25 Pa. Code §123.43]

Measuring techniques

Visible emissions may be measured using either of the following:

(a) a device approved by the Department and maintained to provide accurate opacity measurements; or
(b) observers, trained and qualified to measure plume opacity with the naked eye or with the aid of any devices approved by the Department.

SECTION C. Site Level Requirements

 # 011 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.511]

(a) The permittee shall monitor the facility, once per operating day, for the following:
(1) odors which may be objectionable (as per 25 Pa. Code §123.31);
(2) visible emissions (as per 25 Pa. Code §§123.41 and 123.42); and
(3) fugitive particulate matter (as per 25 Pa. Code §§ 123.1 and 123.2).

(b) Objectionable odors, fugitive particulate emissions, and visible emissions that are caused or may be caused by operations at the site shall:
(1) be investigated;
(2) be reported to the facility management, or individual(s) designated by the permittee;
(3) have appropriate corrective action taken (for emissions that originate on-site); and
(4) be recorded in a permanent written log.

(c) After six (6) months of daily monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the monitoring frequency to weekly.

(d) After six (6) months of weekly monitoring, and upon the permittee's request, the Department will determine the feasibility of decreasing the frequency of monitoring to monthly.

(e) The Department reserves the right to change the above monitoring requirements at any time, based on but not limited to: the review of the compliance certification (if applicable), complaints, monitoring results, and/or Department findings.

IV. RECORDKEEPING REQUIREMENTS.

 # 012 [25 Pa. Code §127.441]
Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 25 Pa. Code § 127.511.]

The permittee shall maintain a record of all monitoring of fugitive emissions, visible emissions and odors, including those that deviate from the conditions found in this permit. The record of deviations shall contain, at a minimum, the following items:

(a) date, time, and location of the incident(s);
(b) the cause of the event; and
(c) the corrective action taken, if necessary, to abate the situation and prevent future occurrences.

 # 013 [25 Pa. Code §127.441]
Operating permit terms and conditions.

The permittee shall maintain records of all the facility's increases of emissions from the following categories:

(a) emissions increase of minor significance without notification to the Department.
(b) de minimis increases with notification to the Department, via letter.
(c) increases resulting from a Request for Determination (RFD) to the Department.
(d) increases resulting from the issuance of a plan approval and subsequent operating permit.

V. REPORTING REQUIREMENTS.

 # 014 [25 Pa. Code §127.441]
Operating permit terms and conditions.

(a) The permittee shall report malfunctions, emergencies or incidents of excess emissions to the Department. A malfunction is any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. An emergency is any situation arising from sudden and

SECTION C. Site Level Requirements

reasonably unforeseeable events beyond the control of the owner or operator of a facility which requires immediate corrective action to restore normal operation and which causes the emission source to exceed emissions, due to unavoidable increases in emissions attributable to the situation. An emergency shall not include situations caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error.

(b) When the malfunction, emergency or incident of excess emissions poses an imminent danger to the public health, safety, welfare, or environment, it shall be reported to the Department and the County Emergency Management Agency by telephone within one (1) hour after the discovery of the malfunction, emergency or incident of excess emissions. The owner or operator shall submit a written or emailed report of instances of such malfunctions, emergencies or incidents of excess emissions to the Department within three (3) business days of the telephone report.

(c) The report shall describe the following:

(1) Name, permit or authorization number, and location of the facility;
(2) Nature and cause of the malfunction, emergency or incident;
(3) Date and time when the malfunction, emergency or incident was first observed;
(4) Expected duration of excess emissions;
(5) Estimated rate of emissions; and
(6) Corrective actions or preventative measures taken.

(d) Any malfunction, emergency or incident of excess emissions that is not subject to the notice requirements of paragraph (b) of this condition shall be reported to the Department by telephone within 24 hours (or by 4:00 PM of the next business day, whichever is later) of discovery and in writing or by e-mail within five (5) business days of discovery. The report shall contain the same information required by paragraph (c), and any permit specific malfunction reporting requirements.

(e) During an emergency an owner or operator may continue to operate the source at their discretion provided they submit justification for continued operation of a source during the emergency and follow all the notification and reporting requirements in accordance with paragraphs (b)-(d), as applicable, including any permit specific malfunction reporting requirements.

(f) Reports regarding malfunctions, emergencies or incidents of excess emissions shall be submitted to the appropriate DEP Regional Office Air Program Manager.

(g) Any emissions resulted from malfunction or emergency are to be reported in the annual emissions inventory report, if the annual emissions inventory report is required by permit or authorization.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.511(c).]

The permittee shall submit the following:

(a) an annual certificate of compliance, due by April 1st of each year, for the period covering January 1 through December 31 of the previous year. This certificate of compliance shall document compliance with all permit terms and conditions set forth in this Title V permit as required under condition #26 of section B of this permit. The annual certificate of compliance shall be submitted to the Department in paper form, and EPA Region III in electronic form at the following email address: R3_APD_Permits@epa.gov

(b) a semi-annual deviation report, due by October 1, of each year, for the period covering January 1 through June 30 of the same year. Note: The annual certification of compliance fulfills the obligation for the second deviation reporting period (July 1 through December 31 of the previous year).

 # 016 [25 Pa. Code §135.21]

Emission statements

The permittee shall submit by March 1, of each year, an annual emission statement for NOx and VOC emissions for the

SECTION C. Site Level Requirements

preceding calendar year. Additionally, a description of the method used to calculate the emissions shall be included. The statement shall contain a certification by a company official or plant manager that the information contained in the statement is true and accurate.

VI. WORK PRACTICE REQUIREMENTS.

 # 017 [25 Pa. Code §123.1]

Prohibition of certain fugitive emissions

A person responsible for any source specified 25 Pa. Code § 123.1 shall take all reasonable actions to prevent particulate matter from becoming airborne. These actions shall include, but not be limited to, the following

(a) use, where possible, of water or suitable chemicals, for control of dust in the demolition of buildings or structures, construction operations, the grading of roads, or the clearing of land;
(b) application of asphalt, water, or other suitable chemicals, on dirt roads, material stockpiles and other surfaces which may give rise to airborne dusts;
(c) paving and maintenance of roadways; and
(d) prompt removal of earth or other material from paved streets onto which earth or other material has been transported by trucking or earth moving equipment, erosion by water, or by other means.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.512.]

The permittee may not modify any air contaminant system identified in this permit, prior to obtaining Department approval, except those modifications authorized by Condition #019(g), of Section B, of this permit.

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this condition is also derived from 25 Pa. Code § 127.512.]

The permittee shall ensure that the source(s) and air pollution control device(s), listed in this permit, are operated and maintained in a manner consistent with good operating and maintenance practices, and in accordance with manufacturer's specifications.

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall immediately, upon discovery, implement measures which may include the application for the installation of an air cleaning device(s), if necessary, to reduce the air contaminant emissions to within applicable limitations, if at any time the operation of the source(s) identified in this permit, is causing the emission of air contaminants in excess of the limitations specified in, or established pursuant to 25 Pa. Code Article III or any other applicable rule promulgated under the Clean Air Act.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VIII. COMPLIANCE CERTIFICATION.

No additional compliance certifications exist except as provided in other sections of this permit including Section B (relating to Title V General Requirements).

IX. COMPLIANCE SCHEDULE.

No compliance milestones exist.

***** Permit Shield In Effect *****

SECTION D. Source Level Requirements

Source ID: 101 Source Name: COMBUSTION TURBINE 1 & DUCT BURNER 1

Source Capacity/Throughput:	2,282.000	MMBTU/HR	
	2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
	333.000	MCF/HR	CAPACITY OF DB

Conditions for this source occur in the following groups: COMBUSTION TURBINES
CSAPR
NSPS KKKK
RACT II

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID 101 consists of, but is not limited to, the following equipment:

SECTION D. Source Level Requirements

(a) Combustion Turbine - heat input of 1,949 MMBTU/hr.
(b) Heat Recovery Steam Generator (HRSG) with Duct Burner - heat input of 333 MMBTU/hr.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 102 Source Name: COMBUSTION TURBINE 2 & DUCT BURNER 2

Source Capacity/Throughput:	2,282.000	MMBTU/HR	
	2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
	333.000	MCF/HR	CAPACITY OF DB

Conditions for this source occur in the following groups: COMBUSTION TURBINES
CSAPR
NSPS KKKK
RACT II

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID 102 consists of, but is not limited to, the following equipment:

SECTION D. Source Level Requirements

(a) Combustion Turbine - heat input of 1,949 MMBTU/hr.
(b) Heat Recovery Steam Generator (HRSG) with Duct Burner - heat input of 333 MMBTU/hr.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 103 Source Name: COMBUSTION TURBINE 3 & DUCT BURNER 3

Source Capacity/Throughput:	2,282.000	MMBTU/HR	
	2,282.000	MCF/HR	TOTAL CAP. OF CT & DB
	333.000	MCF/HR	CAPACITY OF DB

Conditions for this source occur in the following groups: COMBUSTION TURBINES
CSAPR
NSPS KKKK
RACT II

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Source ID 103 consists of, but is not limited to, the following equipment:

SECTION D. Source Level Requirements

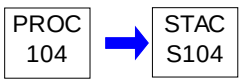
(a) Combustion Turbine - heat input of 1,949 MMBTU/hr.
(b) Heat Recovery Steam Generator (HRSG) with Duct Burner - heat input of 333 MMBTU/hr.

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 104 Source Name: COOLING TOWER W/ HIGH EFF DRIFT ELIMINATOR

Source Capacity/Throughput: 8.904 M Gal/HR WATER



I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall limit the emissions of particulate matter from the 12-cell cooling tower to 14.8 tons in a 12-month rolling period.

Throughput Restriction(s).

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall limit the total dissolved/suspended solids (TDS/TSS) in the cooling tower blowdown water to 9,000 (mg/L), or less.

(b) The permittee may use specific conductivity as an indicator for determining the total dissolved/suspended solids content of the cooling tower blowdown water. The specific conductivity shall not exceed 8,000 µs/cm (micro siemens per centimeter).

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall on a weekly basis, test the cooling tower water for total dissolved/suspended solids (TDS/TSS), or for specific conductivity.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the amount of circulating water that flows through this cooling tower on a weekly basis.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the amount of circulating water that flows through this cooling tower on a weekly basis.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of the results of each test performed to determine the specific conductivity, or total dissolved/suspended solids content of the cooling tower water.

SECTION D. Source Level Requirements

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall calculate and record the particulate matter emissions from this source on a monthly and a 12-month rolling basis.

When specific conductivity is used as a compliance indicator, the permittee shall calculate the particulate matter emissions based on the correlation coefficient for the relationship between specific conductivity and TDS/TSS.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep a copy of the manufacturer's specifications for this cooling tower and its control equipment on site.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain this cooling tower in accordance with manufacturer's specifications, as well as good air pollution control practices.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The emissions of particulate matter from each cell of this cooling tower shall be controlled by a high efficiency drift eliminator.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: 105 Source Name: PARTS WASHER

Source Capacity/Throughput: N/A CLEANING SOLVENT

PROC 105 → STAC Z105

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall keep records of receipts to show how much solvent is added to the source and removed from this source per delivery. Receipts shall be kept at the site for a period of five (5) years and be made available to the Department upon request.

 # 002 [25 Pa. Code §129.63]

Degreasing operations

(a). A person who sells or offers for sale any solvent containing VOCs for use in a cold cleaning machine shall provide, to the purchaser, the following written information:

(1). The name and address of the solvent supplier.
(2). The type of solvent including the product or vendor identification number.
(3). The vapor pressure of the solvent measured in mm hg at 20°C (68°F).

(b). A person who operates a cold cleaning machine shall maintain for at least 2 years and shall provide to the Department, on request, the information specified in Condition #001(a) above. An invoice, bill of sale, certificate that corresponds to a number of sales, Safety Data Sheet (SDS), or other appropriate documentation acceptable to the Department may be used to comply with this section.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

SECTION D. Source Level Requirements

VI. WORK PRACTICE REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain this source in accordance with manufacturer's specifications and good air pollution control practices.

 # 004 [25 Pa. Code §129.63]

Degreasing operations

(a). Cold cleaning machines shall be operated in accordance with the following procedures:

(1). Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container.

(2). Flushing of parts using a flexible hose or other flushing device shall be performed only within the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray.

(3). Sponges, fabric, wood, leather, paper products and other absorbent materials may not be cleaned in the cold cleaning machine.

(4). Air agitated solvent baths may not be used.

(5). Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately.

(b). A person may not use, sell or offer for sale for use in a cold cleaning machine any solvent with a vapor pressure of 1.0 millimeter of mercury (mm Hg) or greater and containing greater than 5% VOC by weight, measured at 20°C (68°F) containing VOCs.

 # 005 [25 Pa. Code §129.63]

Degreasing operations

Remote reservoir cold cleaning machines shall:

(a). Have a permanent, conspicuous label summarizing the operating requirements in Condition #003. In addition, the label shall include the following discretionary good operating practices:

(1). Cleaned parts should be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts should be positioned so that solvent drains directly back to the cold cleaning machine.

(2). When a pump-agitated solvent bath is used, the agitator should be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned.

(3). Work area fans should be located and positioned so that they do not blow across the opening of the degreaser unit.

(b). Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than 6 inches shall constitute an acceptable cover.

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

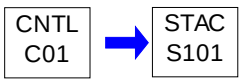
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: C01 Source Name: CT1 SELECTIVE CATALYTIC REDUCTION

Source Capacity/Throughput: N/A EXHAUST FROM 101

Conditions for this source occur in the following groups: SCR



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate the NOx, CO, and O2 CEMS associated with this SCR Unit (Source ID No. C01) at all times when Source ID No. 101 is in operation, including periods of startup, shutdown, malfunction, and events such as operational mode switching, automatic runbacks, and retuning.

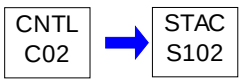
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: C02 Source Name: CT2 SELECTIVE CATALYTIC REDUCTION

Source Capacity/Throughput: N/A EXHAUST FROM 102

Conditions for this source occur in the following groups: SCR



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate the NOx, CO, and O2 CEMS associated with this SCR Unit (Source ID No. C02) at all times when Source ID No. 102 is in operation, including periods of startup, shutdown, malfunction, and events such as operational mode switching, automatic runbacks, and retuning.

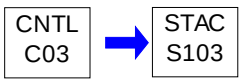
***** Permit Shield in Effect. *****

SECTION D. Source Level Requirements

Source ID: C03 Source Name: CT3 SELECTIVE CATALYTIC REDUCTION

Source Capacity/Throughput: N/A EXHAUST FROM 103

Conditions for this source occur in the following groups: SCR



I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements) and/or Section E (Source Group Restrictions).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate the NOx, CO, and O2 CEMS associated with this SCR Unit (Source ID No. C03) at all times when Source ID No. 103 is in operation, including periods of startup, shutdown, malfunction, and events such as operational mode switching, automatic runbacks, and retuning.

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: COMBUSTION TURBINES

Group Description: Requirements For Combined Cycle Combustion Turbines w/Duct Burners

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 1 & DUCT BURNER 1
102	COMBUSTION TURBINE 2 & DUCT BURNER 2
103	COMBUSTION TURBINE 3 & DUCT BURNER 3

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §123.13]

Processes

No person may permit the emission into the outdoor atmosphere of particulate matter from the combustion turbine associated with this source in excess of 0.02 gr/dscf, pursuant to 25 Pa. Code § 123.13 (c)(1)(iii).

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following air contaminant emission limits are approved for each combustion turbine with a duct burner:

(a). Short Term Emission Limitation for the Combustion Turbine (calculated as one-hour average)
These emission limits are applicable at all times, except during startup and shutdown periods. Compliance with these limits will be determined as indicated per pollutant.

Pollutants	Emissions
Nitrogen Oxides (NOx)	3.5 ppmvd @ 15% oxygen (*)
Volatile Organic Compounds (VOCs)	1.4 ppmvd @ 15% oxygen (**)
Carbon Monoxide (CO)	7.8 ppmvd @ 15% oxygen (*)
Particulate Matter	0.016 lb/MMBTU (PM10 & PM-CON) (**)
Sulfur Dioxides (SO2)	0.007 lb/MMBTU (**) (expressed as SO2)
Sulfuric Acid (Mist)	0.0024 lb/MMBTU (**)

(b). Short Term Emission Limitation for the Combustion Turbine and Duct Burner (Calculated as one-hour average)
These emission limits are applicable at all times except during startup and shutdown periods.

Pollutants	Emissions
Nitrogen Oxides (NOx)	3.5 ppmvd @ 15% oxygen (*)
Volatile Organic Compounds (VOCs)	3.1 ppmvd @ 15% oxygen (**)
Carbon Monoxide (CO)	13.4 ppmvd @ 15% oxygen (*)
Particulate Matter	0.015 lb/MMBTU (PM10 & PM-CON) (**)
Sulfur Dioxides (SO2)	0.008 lb/MMBTU (**) (expressed as SO2)
Sulfuric Acid (Mist)	0.003 lb/MMBTU (**)

Note :
*: compliance determined through CEMS.
**: compliance determined through stack testing.

(c). Long Term Emission Limitation for the Combustion Turbine and Duct Burner (based on a 12-month rolling period and calculated as a 12-month rolling sum)

Pollutants	Emissions
NOx	112.3 TPY
VOCs	29.6 TPY (1)
CO	246.6
PM	119.3 TPY (2)
SOx	63.4 TPY (SOx expressed as SO2)

SECTION E. Source Group Restrictions.

Sulfuric Acid Mist 22.1 TPY(1)

Note:
(1): calculated using the emission factor determined through the most recent stack testing.
(2): calculated using procedures from 40 C. F. R. Part 75 Appendix D.
[The long term emission limits include the emissions from start-ups, malfunctions, and shutdowns.]

Fuel Restriction(s).

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall combust only natural gas in the combustion turbines.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall combust only natural gas, process gas [gaseous fuel(s)], or a combination of natural gas and process gas in the duct burners. The process gas provided by Sunoco Partners Marketing and Terminals L.P./Marcus Hook (SPMT) shall also meet the standards as specified in 40 CFR Part 60 Subpart KKKK.

(b) At no time shall the process gas have a sulfur content greater than 2.5 grains per 100 dry standard cubic feet based on a 24-hour average.

Throughput Restriction(s).

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall limit the total heat input to the three duct burners at this facility to a combined 6,390,324 million BTU in a 12-month rolling period.

(b) The maximum heat input to each duct burner shall be limited to 333 MMBTU/hr.

(c) The permittee shall limit the three duct burners to a combined heat input of 899 MMBTU/hr.

II. TESTING REQUIREMENTS.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For the combustion turbine:

(a). For the fuel with a total sulfur content less than or equal to 0.5 grains per 100 standard cubic foot, fuel sampling is not required if a valid contract or tariff sheet is used to qualify. If fuel sampling and analysis is required for natural gas to qualify as pipeline natural gas, sample annually and whenever the fuel supply source changes in accordance with the procedures of 40 C.F.R. Part 75 Appendix D. If the sulfur content is less than or equal to 0.5 grains per 100 standard cubic foot, the default SO2 Emission Rate is 0.0006 lbs SO2/MMBTU.

(b). For the fuel with a total sulfur content less than or equal to 0.5 grains per 100 standard cubic foot, the fuel shall be sampled monthly to obtain the Gross Calorific Value (GCV) in accordance with the procedures of 40 C.F.R. Part 75 Appendix D. For the calculations in 40 C.F.R. Part 75 Appendix D, the permittee shall use the GCV from the most recent monthly sample (with greater than or equal to 48 operating hours in the month); the maximum GCV from the contract or tariff sheet, unless a higher value is obtained through the monthly sample; or the highest GCV from the previous year's samples, unless a higher value is obtained in a monthly sample.

(c). If the gaseous fuel does not qualify as pipeline natural gas as defined in 40 CFR §72.2 but does qualify as natural gas with a total sulfur content less than or equal to 20 grains per standard cubic foot, then the permittee shall reclassify the gaseous fuel and sample and analyze the gaseous fuel for SO2 Emissions Rate and GCV in accordance with the

SECTION E. Source Group Restrictions.

procedures of 40 C.F.R. Part 75 Appendix D.

(d). If several affected units are supplied by a common source of gaseous fuel, a single sampling result may be applied to all of the units and it is not necessary to obtain a separate sample for each unit, provided that the composition of the fuel is not altered by blending or mixing it with other gaseous fuel(s) when it is transported from the sampling location to the affected units. For the purposes of this paragraph, the term "other gaseous fuel(s)" excludes compounds such as mercaptans when they are added in trace quantities for safety reasons.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall perform a stack test using the Department-approved procedures once every five (5) calendar years, where five calendar years is defined as beginning with the calendar year the latest stack test was performed and ending on December 31, five years later. Performance tests shall be conducted while the source is operating at maximum routine operating conditions or under such other conditions, within the capacity of the equipment, as may be requested by the Department. When testing of a source is required on a recurring basis, a single procedural protocol may be submitted for approval; thereafter, a letter referencing the previously approved procedural protocol is sufficient. However, if modifications are made to the process(es), if a different stack testing company is used, or if an applicable section of the stack testing manual has been revised since approval, a new protocol must be submitted for approval.

(b) At least ninety (90) days prior to the test, the permittee shall submit to the Department for approval the procedures for the test and a sketch with dimensions indicating the location of sampling ports and other data to ensure the collection of representative samples.

(c) The stack test shall, at a minimum, test for PM (filterable PM10 and condensable), VOC, SOx, and sulfuric acid mist. Tests shall be conducted in accordance with the provisions of EPA Methods 1, 2, 3, 4, 5, 6C, 8, 25A, and 202, 25 Pa. Code Chapter 139, NSPS Subpart KKKK, or any other approved alternatives.

(d) At least thirty (30) days prior to the test, the Regional Air Quality Manager, shall be informed of the date and time of the test.

(e) Within sixty (60) days after the source test(s) (unless a more stringent regulatory requirement applies), one paper copy plus one electronic copy of the complete test report, including all operating conditions, shall be submitted to the Regional Air Quality Manager for approval.

(f) In the event that any of the above deadlines cannot be met, the permittee may request an extension for the due date(s) in writing and include a justification for the extension. The Department may grant an extension for a reasonable cause.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[Additional authority for this permit condition is also derived from 40 C.F.R. Part 75 Appendix D.]

For the duct burner combustion,

(a) when only natural gas is combusted in the duct burner, fuel sampling and testing are not required if a valid contract or tariff sheet is used to quantify total sulfur content. Fuel sampling and analysis procedures for natural gas are stated under this source.

(b) when gaseous fuel(s), or a combination of gaseous fuel and natural gas, is combusted in the duct burner, the permittee shall conduct the total sulfur test for gaseous fuel in accordance with 40 C.F.R. Part 75 Appendix D § 2.3.6. If the 720-hour total sulfur variability standard deviation of the hourly values from the mean does not exceed 5.0 grains/100 scf, the fuel has a low sulfur variability. If the standard deviation exceeds 5.0 grains/100 scf, the fuel has a high sulfur variability. Based on the results of this determination, establish the required sampling frequency and SO2 mass emissions methodology for the gaseous fuel, as follows:

(1) If the gaseous fuel has a low sulfur variability (irrespective of the total sulfur content), the permittee may either perform daily sampling of the fuel's total sulfur content using manual sampling or a GC, or may report hourly SO2 mass emissions data using a default SO2 emission rate calculated by substituting the 90th percentile value of the total sulfur content in 40

SECTION E. Source Group Restrictions.

CFR 75 Equation D-1h.

(2) If the gaseous fuel has a high sulfur variability, but the maximum hourly value of the total sulfur content does not exceed 20 grains/100 scf, the permittee may either perform hourly sampling of the fuel's total sulfur content using an on-line GC, or may report hourly SO2 mass emissions data using a default SO2 emission rate calculated by substituting the maximum value of the total sulfur content in 40 CFR 75 Equation D-1h.

(3) If the gaseous fuel has a high sulfur variability and the maximum hourly value of the total sulfur content exceeds 20 grains/100 scf, the permittee shall perform hourly sampling of the fuel's total sulfur content, using an on-line GC.

(4) Any gaseous fuel under paragraph (1) or (2) above, for which the permittee elects to use a default SO2 emission rate for reporting purposes is subject to the annual total sulfur sampling requirement for other gaseous fuels. Use the sample results in the calculations only if the results exceed the 90th percentile value or maximum value (as applicable) from the 720-hour demonstration of fuel sulfur content and variability.

Note: When gaseous fuel is not used in the duct burner for more than 12 consecutive months, the permittee shall conduct the 720-hour total sulfur variability standard deviation test within 5 days when gaseous fuel is used again as fuel in the duct burner.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Testing procedures and method(s) for 24-hour average sulfur content

The permittee shall use the approved method(s) [under SPMT Operating Permit, No. 23-00119] and the following procedures to test sulfur content in the process gas fuel provided by SPMT:

(a) The permittee shall sample sulfur concentrations in the gaseous gas upstream of the duct burner for a period of fourteen (14) consecutive days, ensuring that the data is representative of typical operating conditions affecting total sulfur content in the gaseous fuel stream.

(b) The permittee may rely on the average of the above test data to demonstrate compliance with the gaseous gas sulfur concentration limitation. Additional fourteen (14) consecutive day testing will not be required unless the gaseous gas fuel stream changes in a way that potentially may affect the sulfur concentration to the atmosphere.

(c) Any subsequent testing required by (b), above, shall begin to be conducted beginning within 48 hours of adding a new gaseous gas stream.

Note: The above specified sampling and testing are not required if SPMT provides the sulfur content results tested based on the procedures specified in their Operating Permit, No. 23-00119.

III. MONITORING REQUIREMENTS.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall monitor the date for each malfunction, time for each malfunction, cause of each malfunction, and action taken to correct each malfunction associated with the operation of this combustion turbine and/or duct burner.

(b) The permittee shall monitor each start-up and shutdown of the combustion turbines and/or the duct burners associated with this source. The information to monitor shall include date, beginning time of start-up or shutdown, and ending time of start-up or shutdown.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall monitor the following:

(a) The heating value of the natural gas and gaseous fuel(s) on a daily basis. The permittee may apply to the Department to change the monitoring schedule based upon the results on the daily monitoring.

SECTION E. Source Group Restrictions.

(b) The amount of natural gas combusted in each combustion turbine on a monthly basis.

(c) For each duct burner :
(1) the amount of natural gas and/or gaseous fuel(s) combusted hourly.
(2) the amount of heat that the combustion of natural gas and/or gaseous fuel(s) liberates hourly.

(d) For all three duct burners at this facility:
(1) total heat input to the three duct burners in a 12-month rolling period.
(2) total hourly heat input to the three duct burners.

IV. RECORDKEEPING REQUIREMENTS.

 # 012 [25 Pa. Code §127.441]
Operating permit terms and conditions.

The permittee shall

(a) keep records of the results for each grab sample of gaseous fuel obtained for Source IDs 101, 102, and 103.

(b) calculate and record the total emissions of NOx, CO, VOC, PM, SOx, and Sulfuric Acid Mist on a monthly and a 12-month rolling basis.

 # 013 [25 Pa. Code §127.441]
Operating permit terms and conditions.

The permittee shall,

(a) keep records of the date for each malfunction, time for each malfunction, cause of each malfunction, and action taken to correct each malfunction associated with the operation of each combustion turbine and/or duct burner.

(b) keep records of each start-up and shutdown of each combustion turbine and/or the duct burner. The information recorded shall include date, beginning time of start-up or shutdown, and ending time of start-up or shutdown.

 # 014 [25 Pa. Code §127.441]
Operating permit terms and conditions.

The permittee shall keep records of the following:

(a) The heating value of the natural gas and gaseous fuel(s).

(b) The amount of natural gas combusted in each combustion turbine on a monthly basis.

(c) For each duct burner:
(1) the amount of natural gas and/or gaseous fuel(s) combusted hourly.
(2) the amount of heat that the combustion of natural gas and/or gaseous gas liberates hourly, and compiled monthly, to demonstrate compliance with heat input limits [Condition #005(b)].

(d) For all three duct burners at this facility:
(1) total heat input to the three duct burners in a 12-month rolling period, to demonstrate compliance with Condition #005(a).
(2) total hourly heat input to the three duct burners.

 # 015 [25 Pa. Code §127.441]
Operating permit terms and conditions.

(a). The permittee shall keep records of all test results or all supplier certifications for the total sulfur content and Gross Calorific Value (GCV) of the natural gas used in the combustion turbines and the duct burners and the gaseous fuel(s) used in the duct burners.

SECTION E. Source Group Restrictions.

(b). The records of test results or supplier certifications for natural gas and gaseous fuel(s) in paragraph (a) above shall be made available to the Department upon request.

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

 # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following procedures apply to the start-up or shutdown of the combustion turbines:

(a) A cold start-up shall be defined as an event that occurs after a combustion turbine has not been operating for at least 48 hours. A cold start-up shall not last longer than eight hours per start-up for this combustion turbine and no longer than 14 hours per start-up of all three combustion turbines combined.

(b) A warm start-up shall be defined as an event that occurs after a combustion turbine has not been operating for eight hours to 48 hours. A warm start-up shall not last any longer than five hours per start-up for this combustion turbine and not longer than nine hours per start-up of all three combustion turbines combined.

(c) A hot start-up shall be defined as an event that occurs after a combustion turbine has not been operating for less than eight hours. A hot start-up shall not last longer than four hours per start-up for this combustion turbine and not longer than eight hours per start-up of all three combustion turbines combined.

(d) The emissions from start-up or shutdown shall be included in the emissions calculations.

(e) A combustion turbine shutdown begins with the initiation of the shutdown command. A shutdown ends with the termination of fuel injection into the combustion chamber(s). A shutdown of all three combustion turbines shall not last longer than two and one half hours.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall install a fuel metering device(s) to monitor the amount of natural gas and gaseous fuel(s) combusted in the duct burners.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Gaseous fuel combustion devices (the duct burners) having a common source of the fuel gas may be monitored at only one location, if monitoring at this location accurately represents the fuel gas being burned, based on the procedures referenced in 40 CFR Part 75 Appendix 2.3.4.

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall operate and maintain the combustion turbines, the duct burners and associated air pollutant control equipment in accordance with manufacturer's specifications as well as good air pollution control practices.

VII. ADDITIONAL REQUIREMENTS.

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Acid Rain Requirements

(a). This combined cycle combustion turbines are subject to the applicable requirements of 40 C.F.R. Parts 72 through 78. In addition, they are subject to the applicable requirements of 25 Pa. Code § 127.531, regarding special conditions related to acid rain.

SECTION E. Source Group Restrictions.

(b). The permittee shall:
(1) have an valid Acid Rain Permit.
(2) operate the emission sources in compliance with a complete Acid Rain Permit Application or a superseding Acid Rain permit issued by the permitting authority.

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: CSAPR

Group Description: Cross-State Air Pollution Rule (CSAPR) Requirenments

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 1 & DUCT BURNER 1
102	COMBUSTION TURBINE 2 & DUCT BURNER 2
103	COMBUSTION TURBINE 3 & DUCT BURNER 3

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

No additional record keeping requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

V. REPORTING REQUIREMENTS.

No additional reporting requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[40 C.F.R. § 52.2040 and 40 C.F.R. §52.2041 (relating to interstate pollutant transport provisions)]

(a). The owner and operator of each NOx or SO2 source located within the State of Pennsylvania and for which requirements are set forth under the Federal CSAPR in 40 C.F.R. Part 97 must comply with such applicable requirements. The obligation to comply with these requirements in Part 97 will be eliminated by the promulgation of an approval by the EPA's Administrator of a revision to the Pennsylvania State Implementation Plan (SIP) as meeting the requirements of CSAPR, except to the extent the EPA Administrator's approval is partial or conditional or unless such approval is under 40 C.F.R. § 51.123 or under 40 C.F.R. § 51.124. Upon the approval of Pennsylvania's State Implementation Plan, the owner and operator shall comply with 25 Pa. Code §§ 145.8 through 145.223.

(b). Notwithstanding any provisions 40 C.F.R. § 52.2040, if, at the time of such approval of the State's SIP, the EPA's Administrator has already allocated CSAPR NOx Ozone Season allowances to sources in the State for any years, the provisions of 40 C.F.R. Part 97 authorizing the Administrator to complete the allocation of CSAPR NOx Ozone Season allowances for those years shall continue to apply, unless the Administrator approves a SIP provision that provides for the allocation of the remaining CSAPR NOx Ozone Season allowances for those years.

SECTION E. Source Group Restrictions.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[TR NOX Annual Trading Program requirements (40 CFR 97.406)]

(a) Designated representative requirements.
The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR NOX Annual source and each TR NOX Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of TR NOX Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the TR NOX Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NOX emissions requirements.

(1) TR NOX Annual emissions limitation.
(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOX Annual source and each TR NOX Annual unit at the source shall hold, in the source's compliance account, TR NOX Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NOX emissions for such control period from all TR NOX Annual units at the source.
(ii). If total NOX emissions during a control period in a given year from the TR NOX Annual units at a TR NOX Annual source are in excess of the TR NOX Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
(A). The owners and operators of the source and each TR NOX Annual unit at the source shall hold the TR NOX Annual allowances required for deduction under 40 CFR 97.424(d); and
(B). The owners and operators of the source and each TR NOX Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(2) TR NOX Annual assurance provisions.
(i). If total NOX emissions during a control period in a given year from all TR NOX Annual units at TR NOX Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOX emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NOX Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative's share of such NOX emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NOX emissions exceeds the respective common designated representative's assurance level; and (B) The amount by which total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in the state for such control period exceed the state assurance level.

SECTION E. Source Group Restrictions.

(ii). The owners and operators shall hold the TR NOX Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
(iii). Total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in the State during a control period in a given year exceed the state assurance level if such total NOX emissions exceed the sum, for such control period, of the state NOX Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
(iv). It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NOX emissions from all TR NOX Annual units at TR NOX Annual sources in the State during a control period exceed the state assurance level or if a common designated representative's share of total NOX emissions from the TR NOX Annual units at TR NOX Annual sources in the state during a control period exceeds the common designated representative's assurance level.
(v). To the extent the owners and operators fail to hold TR NOX Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
(B). Each TR NOX Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.

(3) Compliance periods.
(i). A TR NOX Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
(ii). A TR NOX Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.
(i). A TR NOX Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NOX Annual allowance that was allocated for such control period or a control period in a prior year.
(ii). A TR NOX Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NOX Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NOX Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, subpart AAAAA.

(6) Limited authorization. A TR NOX Annual allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:
(i). Such authorization shall only be used in accordance with the TR NOX Annual Trading Program; and
(ii). Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NOX Annual allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOX Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit

SECTION E. Source Group Restrictions.

may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR NOX Annual source and each TR NOX Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
(i). The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each TR NOX Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR NOX Annual Trading Program.

(2) The designated representative of a TR NOX Annual source and each TR NOX Annual unit at the source shall make all submissions required under the TR NOX Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR NOX Annual Trading Program that applies to a TR NOX Annual source or the designated representative of a TR NOX Annual source shall also apply to the owners and operators of such source and of the TR NOX Annual units at the source.

(2) Any provision of the TR NOX Annual Trading Program that applies to a TR NOX Annual unit or the designated representative of a TR NOX Annual unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.
No provision of the TR NOX Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOX Annual source or TR NOX Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[TR NOX Ozone Season Trading Program Requirements (40 CFR 97.506)]

(a) Designated representative requirements.
The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.513 through 97.518.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.530 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.531 (initial monitoring system certification and recertification procedures), 97.532 (monitoring system out-of-control periods), 97.533 (notifications concerning monitoring), 97.534 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.535 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.530 through 97.535 shall be used to calculate

SECTION E. Source Group Restrictions.

allocations of TR NOX Ozone Season allowances under 40 CFR 97.511(a)(2) and (b) and 97.512 and to determine compliance with the TR NOX Ozone Season emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.530 through 97.535 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) NOX emissions requirements.

(1) TR NOX Ozone Season emissions limitation.
(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall hold, in the source's compliance account, TR NOX Ozone Season allowances available for deduction for such control period under 40 CFR 97.524(a) in an amount not less than the tons of total NOX emissions for such control period from all TR NOX Ozone Season units at the source.
(ii). If total NOX emissions during a control period in a given year from the TR NOX Ozone Season units at a TR NOX Ozone Season source are in excess of the TR NOX Ozone Season emissions limitation set forth in paragraph (c)(1)(i) above, then:
(A). The owners and operators of the source and each TR NOX Ozone Season unit at the source shall hold the TR NOX Ozone Season allowances required for deduction under 40 CFR 97.524(d); and
(B). The owners and operators of the source and each TR NOX Ozone Season unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(2) TR NOX Ozone Season assurance provisions.
(i). If total NOX emissions during a control period in a given year from all TR NOX Ozone Season units at TR NOX Ozone Season sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NOX emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR NOX Ozone Season allowances available for deduction for such control period under 40 CFR 97.525(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.525(b), of multiplying—
(A). The quotient of the amount by which the common designated representative's share of such NOX emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NOX emissions exceeds the respective common designated representative's assurance level; and
(B). The amount by which total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in the state for such control period exceed the state assurance level.
(ii). The owners and operators shall hold the TR NOX Ozone Season allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
(iii). Total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in the during a control period in a given year exceed the state assurance level if such total NOX emissions exceed the sum, for such control period, of the State NOX Ozone Season trading budget under 40 CFR 97.510(a) and the state's variability limit under 40 CFR 97.510(b).
(iv). It shall not be a violation of 40 CFR part 97, subpart BBBBB or of the Clean Air Act if total NOX emissions from all TR NOX Ozone Season units at TR NOX Ozone Season sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NOX emissions from the TR NOX Ozone Season units at TR NOX Ozone Season sources in the state during a control period exceeds the common designated representative's assurance level.
(v). To the extent the owners and operators fail to hold TR NOX Ozone Season allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
(B). Each TR NOX Ozone Season allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate

SECTION E. Source Group Restrictions.

violation of 40 CFR part 97, subpart BBBBB and the Clean Air Act.

(3) Compliance periods.
(i). A TR NOX Ozone Season unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.
(ii). A TR NOX Ozone Season unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.530(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.
(i). A TR NOX Ozone Season allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR NOX Ozone Season allowance that was allocated for such control period or a control period in a prior year.
(ii). A TR NOX Ozone Season allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR NOX Ozone Season allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

(5) Allowance Management System requirements. Each TR NOX Ozone Season allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart BBBBB.

(6) Limited authorization. A TR NOX Ozone Season allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:
(i). Such authorization shall only be used in accordance with the TR NOX Ozone Season Trading Program; and
(ii). Notwithstanding any other provision of 40 CFR part 97, subpart BBBBB, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR NOX Ozone Season allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR NOX Ozone Season allowances in accordance with 40 CFR part 97, subpart BBBBB.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.530 through 97.535, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E). Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.506(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
(i). The certificate of representation under 40 CFR 97.516 for the designated representative for the source and each TR NOX Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.516 changing the designated representative.
(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart BBBBB.
(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to

SECTION E. Source Group Restrictions.

demonstrate compliance with the requirements of, the TR NOX Ozone Season Trading Program.

(2) The designated representative of a TR NOX Ozone Season source and each TR NOX Ozone Season unit at the source shall make all submissions required under the TR NOX Ozone Season Trading Program, except as provided in 40 CFR 97.518. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR NOX Ozone Season Trading Program that applies to a TR NOX Ozone Season source or the designated representative of a TR NOX Ozone Season source shall also apply to the owners and operators of such source and of the TR NOX Ozone Season units at the source.

(2) Any provision of the TR NOX Ozone Season Trading Program that applies to a TR NOX Ozone Season unit or the designated representative of a TR NOX Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.
No provision of the TR NOX Ozone Season Trading Program or exemption under 40 CFR 97.505 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR NOX Ozone Season source or TR NOX Ozone Season unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

[TR SO2 Group 1 Trading Program requirements (40 CFR 97.606)]

(a) Designated representative requirements.
The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the designated representative, of each TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of TR SO2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the TR SO2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

(c) SO2 emissions requirements.

(1) TR SO2 Group 1 emissions limitation.
(i). As of the allowance transfer deadline for a control period in a given year, the owners and operators of each TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall hold, in the source's compliance account, TR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO2 emissions for such control period from all TR SO2 Group 1 units at the source.
(ii). If total SO2 emissions during a control period in a given year from the TR SO2 Group 1 units at a TR SO2 Group 1 source are in excess of the TR SO2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:

SECTION E. Source Group Restrictions.

(A). The owners and operators of the source and each TR SO2 Group 1 unit at the source shall hold the TR SO2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and
(B). The owners and operators of the source and each TR SO2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(2) TR SO2 Group 1 assurance provisions.
(i). If total SO2 emissions during a control period in a given year from all TR SO2 Group 1 units at TR SO2 Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO2 emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) TR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
(A). The quotient of the amount by which the common designated representative's share of such SO2 emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO2 emissions exceeds the respective common designated representative's assurance level; and
(B). The amount by which total SO2 emissions from all TR SO2 Group 1 units at TR SO2 Group 1 sources in the state for such control period exceed the state assurance level.
(ii). The owners and operators shall hold the TR SO2 Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
(iii). Total SO2 emissions from all TR SO2 Group 1 units at TR SO2 Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO2 emissions exceed the sum, for such control period, of the state SO2 Group 1 trading budget under 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
(iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO2 emissions from all TR SO2 Group 1 units at TR SO2 Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO2 emissions from the TR SO2 Group 1 units at TR SO2 Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
(v). To the extent the owners and operators fail to hold TR SO2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
(A). The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
(B). Each TR SO2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart CCCCC and the Clean Air Act.

(3) Compliance periods.
(i). A TR SO2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
(ii). A TR SO2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.

(4) Vintage of allowances held for compliance.
(i). A TR SO2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a TR SO2 Group 1 allowance that was allocated for such control period or a control period in a prior year.
(ii). A TR SO2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a TR SO2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.

SECTION E. Source Group Restrictions.

(5) Allowance Management System requirements. Each TR SO2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart CCCCC.

(6) Limited authorization. A TR SO2 Group 1 allowance is a limited authorization to emit one ton of SO2 during the control period in one year. Such authorization is limited in its use and duration as follows:
(i). Such authorization shall only be used in accordance with the TR SO2 Group 1 Trading Program; and
(ii). Notwithstanding any other provision of 40 CFR part 97, subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

(7) Property right. A TR SO2 Group 1 allowance does not constitute a property right.

(d) Title V permit revision requirements.

(1) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of TR SO2 Group 1 allowances in accordance with 40 CFR part 97, subpart CCCCC.

(2) This permit incorporates the TR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR part 75, subparts B and H), an excepted monitoring system (pursuant to 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR part 75.19), and an alternative monitoring system (pursuant to 40 CFR part 75, subpart E), Therefore, the Description of TR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of each TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
(i). The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each TR SO2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
(ii). All emissions monitoring information, in accordance with 40 CFR part 97, subpart CCCCC.
(iii). Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the TR SO2 Group 1 Trading Program.

(2) The designated representative of a TR SO2 Group 1 source and each TR SO2 Group 1 unit at the source shall make all submissions required under the TR SO2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

(f) Liability.

(1) Any provision of the TR SO2 Group 1 Trading Program that applies to a TR SO2 Group 1 source or the designated representative of a TR SO2 Group 1 source shall also apply to the owners and operators of such source and of the TR SO2 Group 1 units at the source.

(2) Any provision of the TR SO2 Group 1 Trading Program that applies to a TR SO2 Group 1 unit or the designated representative of a TR SO2 Group 1 unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

SECTION E. Source Group Restrictions.

No provision of the TR SO2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a TR SO2 Group 1 source or TR SO2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: NSPS KKKK

Group Description: NSPS Subpart KKKK Requirenments

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 1 & DUCT BURNER 1
102	COMBUSTION TURBINE 2 & DUCT BURNER 2
103	COMBUSTION TURBINE 3 & DUCT BURNER 3

I. RESTRICTIONS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

II. TESTING REQUIREMENTS.

No additional testing requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

III. MONITORING REQUIREMENTS.

No additional monitoring requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

IV. RECORDKEEPING REQUIREMENTS.

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall keep records of the initial performance tests and subsequent stack tests performed once during each term of this Title V Permit on each source to demonstrate compliance with the applicable NOx and SO2 emissions in a manner consistent with the limitations of 40 CFR Part 60 Subpart KKKK.

(b) The permittee shall keep records of calculations to demonstrate that the applicable NOx and SO2 emissions limits of 40 CFR Part 60 Subpart KKKK will not be exceeded during typical operation for each source.

(c) The permittee shall calculate and record NOx concentrations from each source for demonstration of compliance with applicable requirements of 40 CFR Part 60 Subpart KKKK.

(d) The permittee shall keep records of fuel sulfur test results and/or SO2 emissions from each source for demonstration of compliance with applicable requirements of 40 CFR Part 60 Subpart KKKK.

(e) The permittee shall keep records of all requests, reports, applications, submittals and other communications regarding affected sources.

V. REPORTING REQUIREMENTS.

 # 002 [40 CFR Part 60 Standards of Performance for New Stationary Sources §40 CFR 60.4]

Subpart A - General Provisions

Address.

The permittee is subject to New Source Performance Standards from 40 CFR Part 60, Subpart KKKK. In accordance with 40 CFR § 60.4; copies of all requests, reports, applications, submittals and other communications regarding affected sources shall be forwarded to both the Department at the address listed below, and U.S. EPA at one of the points of contact listed below unless otherwise noted.

PADEP
Air Quality Program
2 E. Main Street
Norristown, PA 19401

Associated Director

SECTION E. Source Group Restrictions.

Office of Air Enforcement and Compliance Assistance (3AP20)
U.S. EPA, Region III
1650 Arch Street
Philadelphia, PA 19103-2029

Region III e-mail box for electronic compliance certifications:
R3_APD_Permits@epa.gov

NSPS and MACT reports that are submitted electronically to U.S. EPA's Central Data Exchange:
https://cdx.epa.gov/

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]
Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4320 : NOx emission limits

(a) The permittee shall meet the emission limits for NOx as stated below:
-15 ppm @ 15% OR or 54 ng/J of useful output (0.43 lb/MWhr) when turbines are operating greater than or equal to 75% of peak load and at a temperature greater than or equal to 0°F.
-96 ppm @ 15% O2 or 590 ng/J of useful output (4.7 lb/MWhr) when turbines are operating at less than 75% of peak load or temperatures less than 0°F.

(b) If you have two or more turbines that are connected to a single generator, each turbine with or without duct burner firing must meet the emission limits for NOx.

Excess NOx emissions shall be identified from CEMS data as per 40 CFR § 60.4350. These emissions limits are based on a 30-day rolling average.

 # 004 [25 Pa. Code §127.441]
Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK, § 60.4345: continuous emission monitoring system (CEMS)

(a) Each NOx diluent CEMS must be installed and certified according to Performance Specification 2 (PS 2) in appendix B to 40 CFR Part 60, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to 40 CFR Part 60 is not required. Alternatively, a NOx diluent CEMS that is installed and certified according to appendix A of 40 CFR Part 75 of this chapter is acceptable for use under NSPS Subpart KKKK. The relative accuracy test audit (RATA) of the CEMS shall be performed on a lb/MMBtu basis.

(b) As specified in 40 CFR § 60.13(e)(2), during each full unit operating hour, both the NOx monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required for each monitor to validate the NOx emission rate for the hour.

(c) Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of appendix D to 40 CFR Part 75 of this chapter are acceptable for use under NSPS Subpart KKKK.

(d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be installed, calibrated, maintained, and operated according to manufacturer's instructions.

SECTION E. Source Group Restrictions.

(e) The owner or operator shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs (a), (c), and (d) of this section. For the CEMS and fuel flow meters, the owner or operator may, with state approval, satisfy the requirements of this paragraph by implementing the QA program and plan described in section 1 of appendix B to 40 CFR Part 75 of this chapter.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4360: determining the total sulfur content

The permittee shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in §60.4365. The sulfur content of the fuel must be determined using total sulfur methods described in §60.4415. Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than half the applicable limit, ASTM D4084, D4810, D5504, or D6228, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17), which measure the major sulfur compounds, may be used.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4380: NOx excess emissions and downtime

For the purpose of reports required under 40 CFR § 60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

(a) N/A

(b) For turbines using continuous emission monitoring, as described in 40 CFR §§ 60.4335(b) and 60.4345:

(1) An excess emissions is any unit operating period in which the 30-day rolling average NOx emission rate exceeds the applicable emission limit in 40 CFR § 60.4320. For the purposes of this subpart, a "30-day rolling average NOx emission rate" is the arithmetic average of all hourly NOx emission data in ppm or ng/J (lb/MWh) measured by the continuous emission monitoring equipment for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NOx emissions rates for the preceding 30 unit operating days if a valid NOx emission rate is obtained for at least 75 percent of all operating hours.

(2) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NOx concentration, CO2 or O2 concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if you will use this information for compliance purposes.

(3) For operating periods during which multiple emissions standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.

(c) For turbines required to monitor combustion parameters or parameters that document proper operation of the NOX emission controls:

(1) An excess emission is a 4-hour rolling unit operating hour average in which any monitored parameter does not achieve the target value or is outside the acceptable range defined in the parameter monitoring plan for the unit.

(2) A period of monitor downtime is a unit operating hour in which any of the required parametric data are either not recorded or are invalid.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4350: using CEMS to identify excess emissions

SECTION E. Source Group Restrictions.

For purposes of identifying excess emissions:

(a) All CEMS data must be reduced to hourly averages as specified in 40 CFR § 60.13(h).

(b) For each unit operating hour in which a valid hourly average, as described in 40 CFR § 60.4345(b), is obtained for both NOx and diluent monitors, the data acquisition and handling system must calculate and record the hourly NOx emission rate in units of ppm or lb/MMBtu, using the appropriate equation from method 19 in appendix A of 40 CFR Part 60. For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2 (or the hourly average CO2 concentration is less than 1.0 percent CO2), a diluent cap value of 19.0 percent O2 or 1.0 percent CO2 (as applicable) may be used in the emission calculations.

(c) If you have installed and certified a NOx diluent CEMS to meet the requirements of 40 CFR Part 75, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under 40 CFR Part 60, Subpart KKKK. Periods where the missing data substitution procedures in subpart D of 40 CFR Part 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR § 60.7(c).

(d) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.

(e) Calculate the hourly average NOx emission rates, in units of the emission standards under 40 CFR § 60.4320, using either ppm for units complying with the concentration limit or the following equation for units complying with the output based standard:

(1) For simple-cycle operation, using Equation 1 of this subpart.
(2) For combined-cycle and combined heat and power complying with the output-based standard, use Equation 1 of this subpart, except that the gross energy output is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine, the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generator, and 100 percent of the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MW, as in the Equation 2 of this subpart.

(f) For combined cycle and combined heat and power units with heat recovery, use the calculated hourly average emission rates from paragraph (e) of this section to assess excess emissions on a 30 unit operating day rolling average basis, as described in 40 CFR § 60.4380(b)(1).

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4395: reports

All reports required under 40 CFR § 60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK § 60.4333: general requirements

(a) The permittee shall operate and maintain their stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

(b) When an affected unit with heat recovery utilizes a common steam header with one or more combustion turbines, the owner or operator shall either:

(1) Determine compliance with the applicable NOx emissions limits by measuring the emissions combined with the emissions from the other unit(s) utilizing the common heat recovery unit; or

(2) Develop, demonstrate, and provide information satisfactory to the Administrator on methods for apportioning the combined gross energy output from the heat recovery unit for each of the affected combustion turbines. The Administrator may approve such demonstrated substitute methods for apportioning the combined gross energy output measured at the

SECTION E. Source Group Restrictions.

steam turbine whenever the demonstration ensures accurate estimation of emissions related under this part.

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4305: applicability

(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4330: sulfur dioxide emission limits

(a) The permittee shall comply with either paragraph (a)(1), (a)(2), or (a)(3) of this section.

(1) The permittee shall not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO2 in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross output;

(2) The permittee shall not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement; or

(3) For each stationary combustion turbine burning at least 50 percent biogas on a calendar month basis, as determined based on total heat input, the permittee shall not cause to be discharged into the atmosphere from the affected source any gases that contain SO2 in excess of 65 ng SO2/J (0.15 lb SO2/MMBtu) heat input.

(b) If your turbine is located in a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit, the permittee shall comply with one or the other of the following conditions:

(1) You must not cause to be discharged into the atmosphere from the subject stationary combustion turbine any gases which contain SO2 in excess of 780 ng/J (6.2 lb/MWh) gross output, or

(2) You must not burn in the subject stationary combustion turbine any fuel which contains total sulfur with potential sulfur emissions in excess of 180 ng SO2/J (0.42 lb SO2/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

 # 012 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4375: reports

(a) For each affected unit required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under this subpart, the permittee shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction.

SECTION E. Source Group Restrictions.

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), the permittee shall submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

 # 013 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4340: demonstrate continuous compliance for NOX (dry system)

(a) If you are not using water or steam injection to control NOX emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NOX emission result from the performance test is less than or equal to 75 percent of the NOX emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NOX emission limit for the turbine, you must resume annual performance tests.

(b) As an alternative, you may install, calibrate, maintain and operate one of the following continuous monitoring systems:

(1) Continuous emission monitoring as described in §§60.4335(b) and 60.4345, or

(2) Continuous parameter monitoring as follows:

(i) For a diffusion flame turbine without add-on selective catalytic reduction (SCR) controls, you must define parameters indicative of the unit's NOX formation characteristics, and you must monitor these parameters continuously.

(ii) For any lean premix stationary combustion turbine, you must continuously monitor the appropriate parameters to determine whether the unit is operating in low-NOX mode.

(iii) For any turbine that uses SCR to reduce NOX emissions, you must continuously monitor appropriate parameters to verify the proper operation of the emission controls.

(iv) For affected units that are also regulated under part 75 of this chapter, with state approval you can monitor the NOX emission rate using the methodology in appendix E to part 75 of this chapter, or the low mass emissions methodology in §75.19, the requirements of this paragraph (b) may be met by performing the parametric monitoring described in section 2.3 of part 75 appendix E or in §75.19(c)(1)(iv)(H).

 # 014 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4365: exempted from fuel total sulfur content monitoring

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input for units located in continental areas and 180 ng SO2/J (0.42 lb SO2/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng SO2/J (0.42 lb SO2/MMBtu) heat input for noncontinental areas; or

(b) Representative fuel sampling data which show that the sulfur content of the fuel does not exceed 26 ng SO2/J (0.060 lb SO2/MMBtu) heat input for continental areas or 180 ng SO2/J (0.42 lb SO2/MMBtu) heat input for noncontinental areas. At a

SECTION E. Source Group Restrictions.

minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.

 # 015 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4370: frequency of determining the sulfur content

The frequency of determining the sulfur content of the fuel must be as follows:

(a) N/A

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

(c) Custom schedules. Notwithstanding the requirements of paragraph (b) of this section, operators or fuel vendors may develop custom schedules for determination of the total sulfur content of gaseous fuels, based on the design and operation of the affected facility and the characteristics of the fuel supply. Except as provided in paragraphs (c)(1) and (c)(2) of this section, custom schedules shall be substantiated with data and shall be approved by the Administrator before they can be used to comply with the standard in §60.4330.

(1) The two custom sulfur monitoring schedules set forth in paragraphs (c)(1)(i) through (iv) and in paragraph (c)(2) of this section are acceptable, without prior Administrative approval:

(i) The owner or operator shall obtain daily total sulfur content measurements for 30 consecutive unit operating days, using the applicable methods specified in this subpart. Based on the results of the 30 daily samples, the required frequency for subsequent monitoring of the fuel's total sulfur content shall be as specified in paragraph (c)(1)(ii), (iii), or (iv) of this section, as applicable.

(ii) If none of the 30 daily measurements of the fuel's total sulfur content exceeds half the applicable standard, subsequent sulfur content monitoring may be performed at 12-month intervals. If any of the samples taken at 12-month intervals has a total sulfur content greater than half but less than the applicable limit, follow the procedures in paragraph (c)(1)(iii) of this section. If any measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section.

(iii) If at least one of the 30 daily measurements of the fuel's total sulfur content is greater than half but less than the applicable limit, but none exceeds the applicable limit, then:

(A) Collect and analyze a sample every 30 days for 3 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(B) of this section.

(B) Begin monitoring at 6-month intervals for 12 months. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, follow the procedures in paragraph (c)(1)(iii)(C) of this section.

(C) Begin monitoring at 12-month intervals. If any sulfur content measurement exceeds the applicable limit, follow the procedures in paragraph (c)(1)(iv) of this section. Otherwise, continue to monitor at this frequency.

(iv) If a sulfur content measurement exceeds the applicable limit, immediately begin daily monitoring according to paragraph (c)(1)(i) of this section. Daily monitoring shall continue until 30 consecutive daily samples, each having a sulfur content no greater than the applicable limit, are obtained. At that point, the applicable procedures of paragraph (c)(1)(ii) or (iii) of this section shall be followed.

(2) The owner or operator may use the data collected from the 720-hour sulfur sampling demonstration described in section 2.3.6 of appendix D to part 75 of this chapter to determine a custom sulfur sampling schedule, as follows:

(i) If the maximum fuel sulfur content obtained from the 720 hourly samples does not exceed 20 grains/100 scf, no

SECTION E. Source Group Restrictions.

additional monitoring of the sulfur content of the gas is required, for the purposes of this subpart.

(ii) If the maximum fuel sulfur content obtained from any of the 720 hourly samples exceeds 20 grains/100 scf, but none of the sulfur content values (when converted to weight percent sulfur) exceeds half the applicable limit, then the minimum required sampling frequency shall be one sample at 12 month intervals.

(iii) If any sample result exceeds half the applicable limit, but none exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iii) of this section.

(iv) If the sulfur content of any of the 720 hourly samples exceeds the applicable limit, follow the provisions of paragraph (c)(1)(iv) of this section.

 # 016 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4385: define SO2 excess emissions and monitoring downtime

If you choose the option to monitor the sulfur content of the fuel, excess emissions and monitoring downtime are defined as follows:

(a) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the combustion turbine exceeds the applicable limit and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.

(b) N/A

(c) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime ends on the date and hour of the next valid sample.

 # 017 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4400: conduct NOx performance tests

(a) You must conduct an initial performance test, as required in §60.8. Subsequent NOX performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the NOX concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the equation [(Eq. 5) of this section] to calculate the NOX emission rate;
or

(ii) Measure the NOX and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the NOX emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the NOX emission rate in lb/MWh.

(2) Sampling traverse points for NOX and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

SECTION E. Source Group Restrictions.

(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

(i) You may perform a stratification test for NOX and diluent pursuant to

(A) [Reserved], or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point NOX concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent CO2 (or O2) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average NOX concentration during the stratification test; or

(B) For turbines with a NOX standard greater than 15 ppm @ 15% O2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOX concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO2 (or O2) from the mean for all traverse points; or

(C) For turbines with a NOX standard less than or equal to 15 ppm @ 15% O2, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NOX concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent CO2 (or O2) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(1) If the stationary combustion turbine combusts both oil and gas as primary or backup fuels, separate performance testing is required for each fuel.

(2) For a combined cycle and CHP turbine systems with supplemental heat (duct burner), you must measure the total NOX emissions after the duct burner rather than directly after the turbine. The duct burner must be in operation during the performance test.

(3) If water or steam injection is used to control NOX with no additional post-combustion NOX control and you choose to monitor the steam or water to fuel ratio in accordance with §60.4335, then that monitoring system must be operated concurrently with each EPA Method 20 or EPA Method 7E run and must be used to determine the fuel consumption and the steam or water to fuel ratio necessary to comply with the applicable §60.4320 NOX emission limit.

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NOX emission rate at each tested level meets the applicable emission limit in §60.4320.

(5) If you elect to install a CEMS, the performance evaluation of the CEMS may either be conducted separately or (as described in §60.4405) as part of the initial performance test of the affected unit.

(6) The ambient temperature must be greater than 0 °F during the performance test.

 # 018 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4405: perform the initial performance test for a NOX-diluent CEMS

SECTION E. Source Group Restrictions.

If the permittee elects to install and certify a NOX-diluent CEMS under §60.4345, then the initial performance test required under §60.8 may be performed in the following alternative manner:

(a) Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within plus or minus 25 percent of 100 percent of peak load. The ambient temperature must be greater than 0 °F during the RATA runs.

(b) For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) and measure the electrical and thermal output from the unit.

(c) Use the test data both to demonstrate compliance with the applicable NOX emission limit under §60.4320 and to provide the required reference method data for the RATA of the CEMS described under §60.4335.

(d) Compliance with the applicable emission limit in §60.4320 is achieved if the arithmetic average of all of the NOX emission rates for the RATA runs, expressed in units of ppm or lb/MWh, does not exceed the emission limit.

 # 019 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4410: establish a valid parameter range for continuously monitor parameters

If the permittee has chosen to monitor combustion parameters or parameters indicative of proper operation of NOX emission controls in accordance with §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355.

 # 020 [25 Pa. Code §127.441]

Operating permit terms and conditions.

40 CFR Part 60 Subpart KKKK §60.4415: conduct performance tests for sulfur

(a) The permittee shall conduct an initial performance test, as required in §60.8. Subsequent SO2 performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas. The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(i) N/A

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

(2) Measure the SO2 concentration (in parts per million (ppm)), using EPA Methods 6, 6C, 8, or 20 in appendix A of this part. In addition, the American Society of Mechanical Engineers (ASME) standard, ASME PTC 19-10-1981-Part 10, “Flue and Exhaust Gas Analyses,” manual methods for sulfur dioxide (incorporated by reference, see §60.17) can be used instead of EPA Methods 6 or 20. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then use the equation [(Eq. 6) of this section)] to calculate the SO2 emission rate; or

(3) Measure the SO2 and diluent gas concentrations, using either EPA Methods 6, 6C, or 8 and 3A, or 20 in appendix A of this part. In addition, you may use the manual methods for sulfur dioxide ASME PTC 19-10-1981-Part 10 (incorporated by reference, see §60.17). Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the SO2 emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the SO2 emission rate in lb/MWh.

SECTION E. Source Group Restrictions.

(b) [Reserved]

 # 021 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall comply with all conditions of 40 CFR Part 60 Subpart KKKK where applicable. Whenever a conflict occurs, with any of the regulations listed below, the permittee shall, in all cases, meet the more stringent requirement:

(a) 25 Pa. Code §§ 129.97, 129.98, and 129.100 (RACT II)
(b) 40 CFR Part 60 Subpart KKKK
(c) conditions as specified in this permit under 25 Pa. Code Sections

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: RACT II

Group Description: Pennsylvania RACT II Requirements

Sources included in this group

ID	Name
101	COMBUSTION TURBINE 1 & DUCT BURNER 1
102	COMBUSTION TURBINE 2 & DUCT BURNER 2
103	COMBUSTION TURBINE 3 & DUCT BURNER 3

I. RESTRICTIONS.

Emission Restriction(s).

 # 001 [25 Pa. Code §129.97]

Presumptive RACT requirements, RACT emission limitations and petition for alternative compliance schedule.

The combustion turbines with duct burners (Source IDs 101, 102, and 103) shall each meet the applicable VOC RACT emission limitation of 2 ppmvd VOC (as propane) @ 15% O2.

 # 002 [25 Pa. Code §129.98]

Facility-wide or system-wide NOx emissions averaging plan general requirements.

The combustion turbines with duct burners (Source IDs 101, 102, and 103) shall meet the applicable NOx RACT emission limitation of 4 ppm @ 15% O2 by averaging NOx emissions on a facility-wide averaging basis using a 30-day rolling average in accordance with 25 Pa. Code § 129.98 and the site-specific averaging plan, as outlined below:

(a) The facility averaging shall be a summation of the actual hourly mass emissions from all combustion turbines for a 30-operating-day period and comparing it to the calculated allowable mass emissions for the same period. Actual NOx mass emissions shall include emissions during start-ups, shutdowns, retuning, automatic runback and malfunctions. If any unit operates, even if only one unit operates in a given calendar day, then that day shall be one of the days in the 30-operating-day period for the facility.

Hourly NOx mass emission rates (lbs per hour) shall be calculated by converting the hourly NOx concentration values (ppmvd @ 15% O2) to an hourly NOx emissions rate (lb/MMBtu), multiplying the lb/MMBtu by the hourly unit heat input (MMBtu/hr) and the unit operating time.

(b) Heat Input - Unit heat input shall be calculated following the procedures in Appendix D to 40 CFR Part 75—Optional SO2 Emissions Data Protocol for Gas-Fired and Oil-Fired Units. This requires a monthly fuel sample to be drawn from the gas fuel source and sent for analysis of Gross Calorific Values (GCV). The Data Acquisition and Handling System (DAHS) shall use the monthly GCV value and the measured hourly fuel flow volume to determine the heat input for each unit in terms of MMBtu (million British thermal units).

(c) Actual NOx Mass - The measured and calculated hourly NOx ppmvd @ 15% O2 emissions shall be used to calculate the hourly NOx mass emissions using the following equation:

NOx (lbs) = K * Ca * Fd * [20.9 / (20.9 - 15.0)] * H * t

Where:

K = Conversion Constant for NOx, 1.194 x 10 ^ -7
Ca = NOx ppmvd @ 15% O2 CEMS value
Fd = Dry Fuel Factor for natural gas, 8710
H = Heat input value (MMBtu/hr), as determined by §40CFR75, Appendix D
t = time weighting (minutes of operation in hour/60)

(d) Allowable NOx Mass - The allowable RACT NOx concentration (4 ppmvd @ 15% O2) will be used to calculate the allowable hourly NOx mass emissions using the following equation:

NOx (lbs) = K * Cl * Fd * [20.9 / (20.9 - 15.0)] * H * t

Where:

SECTION E. Source Group Restrictions.

Cl = Allowable NOx RACT, 4 ppmvd @ 15% O2
All other factors are the same as for actual NOx mass

(e) 30 Operating Day Values -

Actual NOx mass emissions (lbs) shall be calculated for each hour for each unit. Then, all of the hours for the facility in the 30-operating day period shall be totaled.

Allowable NOx mass emissions (lbs) shall be calculated for each hour for each unit. Then, all of the hours for the facility in the 30-operating day period shall be totaled.

Compliance shall be determined using the following equation from 25 Pa. Code § 129.98(e):

[Sum (i,n) = E i actual] < or = [Sum (i,n) = E i allowable]

Where:

E i actual = The actual NOx mass emissions, including emissions during start-ups, shutdowns, and malfunctions, for air contamination source i on a 30-day rolling basis.

E i allowable = The allowable NOx mass emissions computed using the allowable emission rate limitation (4 ppm NOx @ 15% O2) for air contamination source i on a 30-day rolling basis specified in 25 Pa. Code § 129.97.

n = 4, the number of air contamination sources included in the NOx emissions facility averaging plan.

The facility will be in compliance with the presumptive NOx RACT requirements when the actual NOx mass emissions (lbs) from all stationary combustion turbine units in a facility 30-operating day period are less than or equal to the allowable NOx mass emissions (lbs) during the same 30-operating day period, both values rounded to the nearest pound.

(f) Invalid Emissions Data Periods -

The stationary combustion turbine units operate on a single fuel type - natural gas. Therefore, the presumptive RACT allowable limit is the same for every hour of operation.

40 CFR Part 75 missing data substitution procedures listed in Subpart D or Appendix D will be utilized as appropriate during invalid hours when calculating NOx mass emissions (lbs) and allowable NOx mass emissions (lbs). Substituted data, when present, will be utilized to calculate the 30-operating day rolling average emission rate.

II. TESTING REQUIREMENTS.

 # 003 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

Compliance with the VOC RACT emission limit shall be demonstrated by the following:

(a) Performance testing in accordance with the procedures outlined in 25 Pa. Code, Chapter 139, Subchapter A (relating to sampling and testing methods and procedures).

(b) Conducting an initial performance test no later than January 1, 2017.

(c) Subsequent tests shall be conducted one time in each 5-year calendar period.

III. MONITORING REQUIREMENTS.

 # 004 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

For an air contamination source with a CEMS, the permittee shall conduct monitoring in accordance with the requirements of Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary source) using a 30-day rolling average.

SECTION E. Source Group Restrictions.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

The permittee shall maintain records of required monitoring information that include the following:

(a) Maintain written records demonstrating that the unit installation, maintenance, and operation conforms with the manufacturer's specifications and with good operating practices.

(b) Retain all monitoring data, calibration data, QA/QC data, and any additional information required in 25 Pa. Code, Chapter 139, Subchapter C.

 # 006 [25 Pa. Code §129.100]

Compliance demonstration and recordkeeping requirements.

Records demonstrating compliance with 25 Pa. Code § 129.100 shall be retained by the permittee for 5 years and made available to the Department upon receipt of a written request.

V. REPORTING REQUIREMENTS.

 # 007 [25 Pa. Code §129.98]

Facility-wide or system-wide NOx emissions averaging plan general requirements.

In accordance with 25 Pa. Code § 129.98(j), the permittee shall submit reports and keep records to demonstrate compliance with the requirements of 25 Pa. Code § 129.100 for each source included in the NOx emissions averaging plan. Reports shall be submitted to the Department in accordance with the Department's electronic monitoring plan on a quarterly basis for each source included in the NOx emissions averaging plan.

VI. WORK PRACTICE REQUIREMENTS.

No additional work practice requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

***** Permit Shield in Effect. *****

SECTION E. Source Group Restrictions.

Group Name: SCR

Group Description: Requirements For Selective Catalytic Reduction Systems

Sources included in this group

ID	Name
C01	CT1 SELECTIVE CATALYTIC REDUCTION
C02	CT2 SELECTIVE CATALYTIC REDUCTION
C03	CT3 SELECTIVE CATALYTIC REDUCTION

I. RESTRICTIONS.

Control Device Efficiency Restriction(s).

 # 001 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall maintain the temperature on the SCR catalyst at or above 450 degrees Fahrenheit when the source is in operation, except during periods of startup and shutdown.

II. TESTING REQUIREMENTS.

 # 002 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Certification and Test of the CEMS system

The permittee had installed and certified the CEMS system for this source (all three Phases) according to the Department's standards. The permittee shall keep the test records of all three Phases.

III. MONITORING REQUIREMENTS.

 # 003 [25 Pa. Code §127.441]

Operating permit terms and conditions.

(a) The permittee shall continuously monitor the temperature of the SCR catalyst when the source is in operation.

(b) The permittee shall continuously monitor the amount of ammonia reagent being injected into the SCR (Selective Catalytic Reduction).

 # 004 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Continuous Emission Monitoring System Requirements

The following continuous emission monitoring system[s] (CEMS[s]) must be installed, approved by the Department, operated and maintained in accordance with the requirements of 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), and the "Submittal and Approval", "Record Keeping and Reporting", and "Quality Assurance" requirements of the Department's Continuous Source Monitoring Manual, 274-0300-001.

(a). Nitrogen Oxides (NOx) CEMS

(1). The NOx CEMS shall be used to monitor and record the NOx emissions from the combustion turbine and duct burner of the heat recovery steam generator (HRSG). The CEMS shall be located in the exhaust stack after the Selective Catalytic Reduction (SCR) catalyst and shall operate at all times, including startup, shutdown, and malfunction.

(2). The NOx CEMS shall measure the concentration of NOx in the stack exhaust in units of parts per million (ppm), on a dry volume basis, and correct the concentration of NOx in the stack exhaust to 15 percent oxygen in one-hour averages.

(3). Data Substitution Requirements: The permittee shall report the monitoring downtime for NOx CEMS in the excess emissions and monitoring performance reports in accordance with the requirements of 40 CFR Part 60 Subpart KKKK.

SECTION E. Source Group Restrictions.

(4). Emission Standards for which the NOx CEMS determine compliance:

(i). The short term emission standard for either the emissions from the combustion turbine or the combined emissions from the combustion turbine and the duct burner of the HRSG is violated if the one-hour average NOx concentration exceeds 3.5 ppm, dry volume corrected to 15 percent oxygen, except for periods of startup, shutdown, and malfunction.

(ii). The emission standard from 40 CFR Part 60 Subpart KKKK is presented under Group Name: NSPS KKKK, in Section E of this permit.

(iii). Data from NOx CEMS, including periods of startup and shutdown, shall be used in calculations to determine compliance with the long term applicable permit emission limit of 112.3 tons NOx per year on a 12-month rolling sum basis for this source.

(b). Carbon Monoxide (CO) CEMS

(1). The CO CEMS shall be used to monitor and record the CO emissions from the combustion turbine and duct burner of the heat recovery steam generator (HRSG). The CEMS shall be located in the exhaust stack after the Selective Catalytic Reduction (SCR) catalyst and shall operate at all times, including startup, shutdown, and malfunction.

(2). The CO CEMS shall measure the concentration of CO in the stack exhaust in units of parts per million (ppm), on a dry volume basis, and correct the concentration of CO in the stack exhaust to 15 percent oxygen in one-hour averages.

(3). Data Substitution Requirements: Periods of monitoring downtime are defined in 25 Pa. Code § 139.101(12) and the Department's Continuous Source Monitoring Manual, 274-0300-001.

(4). The Emission Standard for which the CO CEMS determine compliance:

(i). For the combustion turbine only, the Emission Standard is violated if the one-hour average CO concentration is greater than 7.8 ppm CO, dry volume at 15 percent oxygen.

(ii). For the combination of the combustion turbine and the duct burner from the HRSG, the Emission Standard is violated if the one-hour average CO concentration is greater than 13.4 ppm CO, dry volume at 15 percent oxygen.

(5). Since variable emission standards apply based on the operation of this combined cycle combustion turbine, an "Emission Standard Report" is required upon submittal of the emission report for this source for CO emissions.

(c). The oxygen concentration shall be continuously monitored and recorded (in percent, dry basis) for the stack exhaust exiting the SCR catalyst at all times including periods of startup, shutdown, and malfunction.

IV. RECORDKEEPING REQUIREMENTS.

 # 005 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Recordkeeping requirements for Continuous Emission Monitoring Systems for emissions of NOx, CO, and O2 associated with this source

[Additional authority for this permit condition is derived from 40 C.F.R. §§ 75.53, 75.57, and 75.58, 25 Pa. Code §§ 139.101(5) and 139.101(12).]

(a). The permittee shall comply with the recordkeeping requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), (and) the "Record Keeping and Reporting" requirements the Department's Continuous Source Monitoring Manual, 274-0300-001 and the recordkeeping requirements established in 40 C.F.R. §§ 75.53, 75.57, and 75.58.

(b). Records shall be retained for at least 5 years and shall be made available to the Department upon request.

[Compliance with this streamlined permit condition assures compliance with 40 C.F.R. §§ 75.53, 75.57, and 75.58.]

SECTION E. Source Group Restrictions.

 # 006 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The permittee shall continuously record the temperature of the SCR catalyst when this source is in operation.

The permittee shall continuously record the amount of ammonia reagent being injected into the SCR.

V. REPORTING REQUIREMENTS.

 # 007 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Reporting requirements for Continuous Emission Monitoring Systems for emissions of NOx, CO, and O2 associated with this source

[Additional authority for this permit condition is derived from 40 C.F.R. §§ 75.60, 75.61, 75.62, 75.63, 75.64, and 75.66 and 25 Pa. Code §§ 139.101(1)(iv), 139.101(10) and 139.101(12).]

(a). The permittee shall submit quarterly reports of continuous emission monitoring to the Department in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources), [and], the "Record Keeping and Reporting" requirements as established in the Department's Continuous Source Monitoring Manual, 274-0300-001 and the reporting requirements established in 40 CFR §§ 75.60, 75.61, 75.62, 75.63, 75.64, and 75.66.

(b). The permittee shall report emissions for all periods of unit operation, including startup, shutdown and malfunction.

(c). Initial quarterly reports following system certification shall be submitted to the Department within 60 days following the date upon which the Department notifies the owner or operator, in writing, of the approval of the continuous source monitoring system for use in determining compliance with applicable emission standards.

(d). Subsequent quarterly reports shall be submitted to the Department within 30 days after the end of each calendar quarter.

(e). Failure to submit required reports of continuous emission monitoring within the time periods specified in this Condition, shall constitute violations of this Permit, unless approved in advance by the Department in writing.

[Compliance with this streamlined permit condition assures compliance with 40 C.F.R. §§ 75.60, 75.61, 75.62, 75.63, 75.64, and 75.66.]

VI. WORK PRACTICE REQUIREMENTS.

 # 008 [25 Pa. Code §127.441]

Operating permit terms and conditions.

The following conditions apply to the operation of the selective catalytic reduction units (SCR):

(a). Equipment (a rotameter or equivalent, as approved by the Department) shall be provided so that the flow rate of reagent to the SCR system can be measured.

(b). The permittee shall operate and maintain the SCR system in accordance with the manufacturer's specifications and good air pollution control practices.

(c). The permittee shall equip this source with a visual temperature monitor on the SCR catalyst.

 # 009 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Quality assurance requirements for Continuous Emission Monitoring Systems for emissions of NOx, CO, and O2 associated with this source

SECTION E. Source Group Restrictions.

[Additional authority for this permit condition is derived from 40 CFR §§ 60 Appendix B, 75.21, 75.59, 75 Appendix B, and 25 Pa. Code §§ 139.101(1)(iv), 139.101(2), 139.101(3), 139.101(4), 139.101(6), 139.101(7), 139.101(8), 139.101(12), 139.101(14) and 139.101(15).]

Continuous Emission Monitoring Systems (CEMS) and components must be operated and maintained in accordance with the requirements established in 25 Pa. Code Chapter 139, Subchapter C (relating to requirements for source monitoring for stationary sources) and the "Quality Assurance" requirements of the Department's Continuous Source Monitoring Manual, 274-0300-001.

[Compliance with this streamlined permit condition assures compliance with 40 C.F.R. §§ 60 Appendix B, 75.21, 75.59, and 75 Appendix B.]

 # 010 [25 Pa. Code §127.441]

Operating permit terms and conditions.

Data Availability Standards for Continuous Emission Monitoring Systems

(a). NOx CEMS: Continuous emission monitoring shall meet the following minimum data availability requirements for one-hour averaging period data collection:

(1). In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:

(i). In each calendar month, at least 90% of the one-hour average time periods for which an emission standard applies, shall be valid as set forth in the Quality Assurance section of the Department's Continuous Source Monitoring Manual, 274-0300-001.

or,

(ii). In each calendar quarter, at least 95% of the one-hour averaging time periods shall be valid as set forth in the Quality Assurance section of the Department's Continuous Source Monitoring Manual, 274-0300-001.

(2). The data availability standards for the NOx CEMS described in paragraph (a)(1) above apply to the short term emission limit of 3.5 ppmdv at 15 percent oxygen, on a basis of one-hour averages, for the combustion turbine only and the combination of the combustion turbine and HRSG duct burner except during periods of startup and shutdown.

(3). The one-hour averages from the NOx CEMS shall be used to calculate four hour averages for the emissions from the combustion turbine to determine compliance with the requirements of 40 CFR Part 60 Subpart KKKK.

(b). CO CEMS: Continuous emission monitoring shall meet the following minimum data availability requirements for one-hour averaging period data collection:

(1). In accordance with 25 Pa. Code Section 139.101(12), required monitoring shall, at a minimum, meet one of the following data availability requirements unless otherwise stipulated in this permit, a plan approval, Title 25 or an order issued under Section 4 of the Air Pollution Control Act:

(i). In each calendar month, at least 90% of the one-hour average time periods for which an emission standard applies, shall be valid as set forth in the Quality Assurance section of the Department's Continuous Source Monitoring Manual, 274-0300-001.

or,

(ii). In each calendar quarter, at least 95% of the one-hour averaging time periods shall be valid as set forth in the Quality Assurance section of the Department's Continuous Source Monitoring Manual, 274-0300-001.

(2). The data availability standards for the CO CEMS described in paragraph (b)(1) above apply to the short term emission limit of 7.8 ppmdv at 15 percent oxygen, on a basis of one-hour averages, for the combustion turbine only except during

SECTION E. Source Group Restrictions.

periods of startup, shutdown, and malfunction.

(3). The data availability standards for the CO CEMS described in paragraph (b)(1) above apply to the short term emission limit of 13.4 ppmdv at 15 percent oxygen, on a basis of one-hour averages, for the combination of the combustion turbine and HRSG duct burner except during periods of startup, shutdown, and malfunction.

 # 011 [25 Pa. Code §127.441]

Operating permit terms and conditions.

For the combustion turbine:

For any turbine that commenced construction, the permittee may, but is not required to, for purposes of determining excess emissions, use a CEMS that meets the requirements below.

(a). Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 C.F.R. Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. 40 C.F.R. Part 60, Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NOX and diluent monitors may be performed individually or on a combined basis, i.e., the relative accuracy tests of the CEMS may be performed either:

(1). On a ppm basis (for NOx) and a percent O2 basis for oxygen; or

(2). On a ppm at 15 percent O2 basis; or

(3). On a ppm basis (for NOx) and a percent CO2 basis (for a CO2 monitor that uses the procedures in Method 20 to correct the NOx data to 15 percent O2).

(b). As specified in 40 C.F.R. § 60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour.

(c). For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in 40 C.F.R. § 60.13(h).

(1). For each unit operating hour in which a valid hourly average, as described in paragraph (b) above, is obtained for both NOx and diluent, the data acquisition and handling system must calculate and record the hourly NOx emissions in the units of the applicable NOx emission standard under 40 C.F.R. § 60.4320(a), i.e., percent NOx by volume, dry basis, corrected to 15 percent O2 and International Organization for Standardization (ISO) standard conditions (if required as given in 40 C.F.R. § 60.335(b)(1)). For any hour in which the hourly average O2 concentration exceeds 19.0 percent O2, a diluent cap value of 19.0 percent O2may be used in the emission calculations.

(2). A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (Ho), minimum ambient temperature (Ta), and minimum combustor inlet absolute pressure (Po) into the ISO correction equation.

(3). If the owner or operator has installed a NOx CEMS to meet the requirements of 40 C.F.R. Part 75, and is continuing to meet the ongoing requirements of 40 C.F.R. Part 75, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 C.F.R. Part 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in 40 C.F.R. § 60.7(c).

VII. ADDITIONAL REQUIREMENTS.

No additional requirements exist except as provided in other sections of this permit including Section B (Title V General Requirements).

SECTION E. Source Group Restrictions.

***** Permit Shield in Effect. *****

SECTION F. Alternative Operation Requirements.

No Alternative Operations exist for this permit.

SECTION G. Emission Restriction Summary.

Source Id	Source Description
101	COMBUSTION TURBINE 1 & DUCT BURNER 1

Emission Limit			Pollutant
7.800	PPMV	one-hour average for combustion turbine only corrected to 15 % O2 dry basis	CO
13.400	PPMV	one-hour average for combustion turbine and duct burner corrected to 15 % O2 dry basis	CO
246.600	Tons/Yr	total for any consecutive 12-month rolling period	CO
3.500	PPMV	one-hour average emissions for combustion turbine and duct burner; corrected to 15% O2 in dry standard conditions	NOX
4.000	PPMV	@15% O2, as specified in RACT II	NOX
54.000	Tons/OZNESEAS	combustion turbine and duct burner	NOX
112.300	Tons/Yr	total for any consecutive 12-month rolling period	NOX
0.007	Lbs/MMBTU	combustion turbine only; one hour average	SO2
0.008	Lbs/MMBTU	combustion turbine and duct burner one - hour averages	SO2
63.400	Tons/Yr	total for any consecutive 12-month rolling period	SO2
0.002	Lbs/MMBTU	combustion turbine only; one-hour averages	Sulfuric Acid
0.003	Lbs/MMBTU	combustion turbine and duct burner; one hour averages	Sulfuric Acid
22.100	Tons/Yr	total for any consecutive 12-month rolling period	Sulfuric Acid
0.015	Lbs/MMBTU	combustion turbine and duct burner calculated as one hour averages	TSP
0.016	Lbs/MMBTU	combustion turbine only calculated as one-hour averages	TSP
0.020	gr/DRY FT3		TSP
119.300	Tons/Yr	total for any consecutive 12-month rolling period	TSP
1.400	PPMV	one hour average; combustion turbine only; corrected to 15 % O2 dry basis calculated as methane	VOC
2.000	PPMV	on dry basis @15% O2 as propane (RACT II)	VOC
3.100	PPMV	one-hour average for combustion turbine and duct burner; corrected to 15 % O2 dry basis calculated as methane	VOC
29.600	Tons/Yr	total for any consecutive 12-month rolling period	VOC

Source Id	Source Description
102	COMBUSTION TURBINE 2 & DUCT BURNER 2

Emission Limit			Pollutant
7.800	PPMV	one-hour average for combustion turbine only corrected to 15 % O2 dry basis	CO
13.400	PPMV	one-hour average for combustion turbine and duct burner corrected to 15 % O2 dry basis	CO
246.600	Tons/Yr	total for any consecutive 12-month rolling period	CO
3.500	PPMV	one-hour average emissions for combustion turbine and duct burner; corrected to 15% O2 in dry standard conditions	NOX
4.000	PPMV	@15% O2, as specified in RACT II	NOX

SECTION G. Emission Restriction Summary.

Source Id	Source Description

54.000	Tons/OZNESEAS	combustion turbine and duct burner	NOX
112.300	Tons/Yr	total for any consecutive 12-month rolling period	NOX
0.007	Lbs/MMBTU	combustion turbine only; one hour average	SO2
0.008	Lbs/MMBTU	combustion turbine and duct burner one - hour averages	SO2
63.400	Tons/Yr	total for any consecutive 12-month rolling period	SO2
0.002	Lbs/MMBTU	combustion turbine only; one-hour averages	Sulfuric Acid
0.003	Lbs/MMBTU	combustion turbine and duct burner; one hour averages	Sulfuric Acid
22.100	Tons/Yr	total for any consecutive 12-month rolling period	Sulfuric Acid
0.015	Lbs/MMBTU	combustion turbine and duct burner calculated as one hour averages	TSP
0.016	Lbs/MMBTU	combustion turbine only calculated as one-hour averages	TSP
0.020	gr/DRY FT3		TSP
119.300	Tons/Yr	total for any consecutive 12-month rolling period	TSP
1.400	PPMV	one hour average; combustion turbine only; corrected to 15 % O2 dry basis calculated as methane	VOC
2.000	PPMV	on dry basis @15% O2 as propane (RACT II)	VOC
3.100	PPMV	one-hour average for combustion turbine and duct burner; corrected to 15 % O2 dry basis calculated as methane	VOC
29.600	Tons/Yr	total for any consecutive 12-month rolling period	VOC

103 COMBUSTION TURBINE 3 & DUCT BURNER 3

Emission Limit			Pollutant
7.800	PPMV	one-hour average for combustion turbine only corrected to 15 % O2 dry basis	CO
13.400	PPMV	one-hour average for combustion turbine and duct burner corrected to 15 % O2 dry basis	CO
246.600	Tons/Yr	total for any consecutive 12-month rolling period	CO
3.500	PPMV	one-hour average emissions for combustion turbine and duct burner; corrected to 15% O2 in dry standard conditions	NOX
4.000	PPMV	@15% O2, as specified in RACT II	NOX
54.000	Tons/OZNESEAS	combustion turbine and duct burner	NOX
112.300	Tons/Yr	total for any consecutive 12-month rolling period	NOX
0.007	Lbs/MMBTU	combustion turbine only; one hour average	SO2
0.008	Lbs/MMBTU	combustion turbine and duct burner one - hour averages	SO2
63.400	Tons/Yr	total for any consecutive 12-month rolling period	SO2
0.002	Lbs/MMBTU	combustion turbine only; one-hour averages	Sulfuric Acid

SECTION G. Emission Restriction Summary.

Source Id	Source Description

0.003	Lbs/MMBTU	combustion turbine and duct burner; one hour averages	Sulfuric Acid
22.100	Tons/Yr	total for any consecutive 12-month rolling period	Sulfuric Acid
0.015	Lbs/MMBTU	combustion turbine and duct burner calculated as one hour averages	TSP
0.016	Lbs/MMBTU	combustion turbine only calculated as one-hour averages	TSP
0.020	gr/DRY FT3		TSP
119.300	Tons/Yr	total for any consecutive 12-month rolling period	TSP
1.400	PPMV	one hour average; combustion turbine only; corrected to 15 % O2 dry basis calculated as methane	VOC
2.000	PPMV	on dry basis @15% O2 as propane (RACT II)	VOC
3.100	PPMV	one-hour average for combustion turbine and duct burner; corrected to 15 % O2 dry basis calculated as methane	VOC
29.600	Tons/Yr	total for any consecutive 12-month rolling period	VOC

104 COOLING TOWER W/ HIGH EFF DRIFT ELIMINATOR

Emission Limit			Pollutant
14.800	Tons/Yr	sum for any consecutive 12-month rolling period	TSP

Site Emission Restriction Summary

Emission Limit	Pollutant

SECTION H. Miscellaneous.

This Title V Permit incorporates the terms and conditions from plan approval PA-23-0089.

The capacities and/or throughputs for fuel and materials that are listed in Sections A and D of this State Only Operating Permit are used for descriptive purposes. These capacities and/or throughputs are not considered limitations or enforceable conditions by the Department.

****

APS No. 562726; Authorization No. 938640: This action is for an administrative amendment to remove the shared cap between Sunoco R&M, Inc. (Sunoco) and FPL Energy Marcus Hook, LP. Sunoco has closed its refinery and has submitted an application for Emission Reduction Credits for the shutdown of sources at this facility. The shared cap on nitrogen oxides, sulfur oxides, and particulate matter has been dissolved with this action.

****

APS No. 562726; AUTH No. 997223, Date: November 2014: Operating Permit Renewal.
- Source IDs 101, 102, and 103 are also permitted under Phase II (Title IV) Acid Rain Permit.
- This facility is not subject to 40 CFR 60 Subpart J, as Sunoco Marcus Hook stopped providing refinery gas to the duct burners since December 2011.
- The gaseous fuel(s) from Sunoco Partners Marketing & Terminals, L.P., is permitted as an alternative fuel for the duct burners.
- The applicable requirements of CSAPR (or TR) are added into the permit.

Specifically, for each ozone season beginning after January 1, 2015, the Department intends to accept the surrender of annual and ozone season TR NOx allowances as a compliance alternative to the surrender of annual and ozone season CAIR NOx allowances if the TR allowances are surrendered for compliance purposes in a manner consistent with the surrender provisions for CAIR allowances set forth in the applicable sections specified in this notice. The Department consulted with staff in the United States Environmental Protection Agency (EPA) Region III Office in developing an alternative allowance surrender approach for compliance with the applicable SIP-approved requirements. To this end, the EPA has confirmed, in writing, that TR NOx allowances may be surrendered as set forth in the applicable regulations in 25 Pa. Code Chapters 129 and 145. A detailed notice was published in the PA bulletin on April 4, 2015 [45 Pa.B. 1687]

****

APS No. 934937; AUTH No. 1172146; Date: March 2017: Administrative Amendment for Change of Ownership
- Name change from FPL Marcus Hook Energy, L.P., to Marcus Hook Energy, L. P., effective on November 21, 2016. The facility Tax ID remains unchanged.
- Similar changes are made for Phase II Acid Rain Permit.

****

APS No. 562726; AUTH No. 1316597; Date: 2020; Operating Permit Renewal
- The facility is subject to RACT II and NSPS Subpart KKKK (due to the AGP project). All applicable requirements are added into the permit.
- The facility is no longer subject to NSPS Subparts Da and GG and the requirements under these subparts are removed.
- Four (4) Auxiliary Boilers (392.5 MMBtu/hr each, owned by SPMT) are now fully owned and operated by SPMT (since 2016). The facility produces its own steam through the operation of the three combustion turbines and provides a portion of that steam to SPMT as needed.

****** End of Report ******